

Scalar® 1000 Library

Operator Guide

M Advanced Digital Information Corp

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1-2 Introduction 600561-A

Overview

This manual contains information and instructions necessary for the safe operation of the Scalar 1000 ¹ library. The topics discussed in this chapter are:

- Overview
- Intended Audience
- Organization
- Associated Documents
- Explanation of Symbols and Notes
- Assistance

Intended Audience

This guide is intended for operators, trained customer specialists, and maintenance personnel of the service partner who interact with the Scalar 1000.

Organization

This publication contains chapters detailing the operation of the Scalar 1000. The chapters topics include:

Chapter 1	Introduction - Describes the overview,
•	intended audience, organization,
	associated documents, explanation of

additional assistance.

Chapter 2 Description - Describes general

information about the Scalar 1000

symbols and notes, and how to obtain

components.

Chapter 3 Safety - Describes the hazard symbols,

messages, safety features, and operational considerations for the safe operation of the

Scalar 1000.

Chapter 4 Operation - Describes the Remote

Management Unit operations and menus, and functional start up and shut down

operations of the Scalar 1000.

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^{1.} Scalar 1000 is a trademark of ADIC. Throughout the remainder of this document, we refer to the Scalar 1000 library as the Scalar 1000.

Chapter 5 Menus and Commands - Describes the

visual menus and commands executed by

the Scalar 1000.

Chapter 6 Processing Media- Describes the

Insert/Eject station, various media, and

processing of the media.

Chapter 7 Error Messages - Describes message

processing and troubleshooting hints.

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Associated Documents

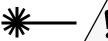
600838 Scalar 1000 Maintenance Guide 600974 Scalar 1000 SCSI Reference Manual

Explanation of Symbols and Notes

The following symbols and highlighted passages note important information.













Detailed explanations for the above symbols are provided in *Hazard Alert Messages* on page 3-3.

<1> + <2> Press these keys simultaneously.

Italics Headline, e. g., Chapter 2, Description

File name, e. g., AMUINST.EXE

Bold Terms appearing on the operating panel

Special Term, e. g., **Utilities**

Operating element/key on the operating

panel

Courier Command line,

Switch position, e. g., ON, OFF

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Assistance



Operation of the Scalar 1000 by untrained personnel can lead to dangerous situations. The consequence could be severe or fatal injury caused by contact with electrical connections. Therefore, introductory training by ADIC is recommended for all who work with the Scalar 1000.

An operator is responsible for ensuring that only qualified personnel perform the following procedures on the equipment:

- Prepare for operation
- Set-up
- Start-up
- Operate
- Shutdown
- Maintenance
- Restart



Some work and modifications can only be performed with the appropriate qualifications and training.

Most importantly, know and observe all safety rules before working with the equipment.

If problems cannot be solved with the aid of this document or if recommended training is desired, contact the ADIC Technical Assistance Center (ATAC).

Phone	Number
In the USA:	800.827.3822
Outside the USA, toll free:	00800.9999.3822
Outside the USA:	303.874.0188
Send email to:	techsup@adic.com

Federal Communication Commission Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and,

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if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

To meet FCC emissions limits, properly shielded and grounded cables and connectors must be used. The user accepts responsibility for radio or television interference caused by improperly shielded or grounded cables and connectors or by unauthorized modifications or changes to the equipment. Unauthorized modifications or changes could void the user's authority to operate the equipment.

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2-2 Description 600561-A

Overview

An in-depth description of the subsystem, tape cartridge, storage and drive configuration, and optional features are provided.

Subsystem Description

The Scalar 1000 is a library that automates the retrieval, storage and control of half-inch type cartridge tapes (8490, 3480, 3590/E), DLT (4000, 7000, and 8000) and 8mm (AIT) type cartridges. If the library is configured for 8mm cartridges, no other cartridge type may be used in the library.

The Scalar 1000 configuration can contain a maximum of 4 frames. The Scalar 1000 consists of a Control Module and up to 3 Expansion Modules. Refer to Figure 2-1 on page 2-4 for an illustration of a basic Control and Expansion Module. The Control Module contains library control hardware, the cartridge accessor, an Insert/Eject Station (I/E Station), an Operator panel, cartridge storage cells and tape drives. The Expansion Module can contain tape drives and cartridge storage.

The Scalar 1000 can be configured for 118 to 788 half-inch storage cells or 237 to 1182 8mm storage cells and 1 to 48 drives. See Table 2-1.

Note

If the ADIC 8590/ IBM 3590 tape drive is installed in either the Control or the Expansion Module, the modules must be of the large foot print type. This can be accomplished by having an **Extension Frame** added to a normal frame which increases the depth of the frame.

Table 2-1 Maximum Number of Drives Within Each Module

Module Type	High Profile Tape Drives (3590/DLT)	Low Profile Tape Drives (DLT/AIT)
Control Module	4	12
Expansion Module	4	12

An example of the Scalar 1000 library system with one control module and one expansion module is illustrated in Figure 2-1 on page 2-4.

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Figure 2-1 Scalar 1000 Frames

Host Attachment

The Scalar 1000 contains two independent SCSI device adapters that offer additional flexibility during installation. The library can be configured with either the High Voltage Differential (HVD) or Low Voltage Differential/Single Ended (LVD/SE) SCSI card, depending on the host adapter. Each SCSI bus must be terminated with the appropriate HVD or LVD/SE terminator. Although the Scalar 1000 can be attached to a wide SCSI device it is not a wide SCSI device and the SCSI ID must be in the range of 0 to 7.

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As an alternative, the Scalar 1000 can be network attached through an Archive Management Unit (AMU) in a main frame, UNIX, or Windows NT environment. Contact a sales representative for additional information about using the AMU.

The Scalar 1000 can also be connected to a Fibre Channel Host via the ADIC Fibre Channel Router (FCR). The ADIC FCR provides one or two SCSI parallel bus connections and a Fibre Channel connection, translating (bridging) the SCSI protocol between these two media types. Up to six FCR's can be installed in each Scalar 1000 frame. Refer to the ADIC Web site, www.adic.com, for specifications of different ADIC FCR models.

Remote Management Unit (RMU)

The Remote Management Unit (RMU) resides in each system and is pre-installed at the factory. The RMU allows remote access via a Web browser to the library. Microsoft Internet Explorer version 4.0 and above, as well as Netscape Navigator versions 4.01, 4.5, and 4.73 are supported by the RMU.

The user is able to remotely access library status, the library Operator Panel, and Scalar 1000 documentation via the RMU. The RMU also allows the user to remotely update firmware in the RMU and the library's controller, retrieve library command and logs, and make configuration changes. The RMU supports Simple Network Management Protocol (SNMP) version 2.0 and acts as an SNMP-server. The RMU acquires Tape Alert 3.0 compatibility information from the library over the serial interface port and sends that information to a SNMP server. The RMU also detects a power loss and generates a SNMP trap for notification. Refer to *Remote Management Unit (RMU)* on page 4-8 for more information.

Subsystem Description 2-5

Functional Description

The Scalar 1000 can be installed on a solid or a raised floor.

The cartridge accessor moves cartridges between storage cells, tape drives and the Insert/Eject Station (I/E Station). The cartridge accessor includes the gripper. A barcode scanner on the gripper identifies the cartridges in cells. Refer to *Cartridge Accessor* on page 2-12 for additional details. The Insert/Eject Station allows cartridges to be added to or removed from the Scalar 1000 without interrupting the operation of the library. Refer to *Insert/Eject Station* on page 2-14 for additional information.

The cartridge storage cells, cartridge accessor, and tape drives are accessed by opening the door on the front or rear of the Scalar 1000 module in which the component is found. Maintenance activities are performed by using this door.

Requests from the host result in cartridge movement in the library. The primary requests are for loading and unloading cartridges to and from the tape drives and for inserting and ejecting cartridges to or from the library. The host maintains records of the physical location of a tape cartridge volume in the library. The physical location is also managed by the library. Each volume can have a machine and operator-readable external label to identify a volume in the library during initial inventory and any time a volume is added to the library. The library stores the physical location of the cartridge in an inventory database that is based on the cartridge bar code number (BC).

In addition to requesting movement of cartridges in the library, the host can request status, performance, configuration, and cartridge storage information.

Functional Units

The Scalar 1000 consists of the following functional units:

- Tape Drives
- Library control hardware
- Cartridge storage cells
- Cartridge accessor
- Insert/Eject Station

Tape Drives

The Scalar 1000 supports the following tape drives:

2-6 Description 600561-A



- Model 8490 (half inch)
- Model 8590 (half inch)
- IBM 3590/E (half inch)
- Plasmon NCTP (half inch)
- Model 4001 (DLT)
- Model 4001S (DLT)
- Model 7001 (DLT)
- Model 7001S (DLT)
- Model 8001S (DLT)
- AIT3102 (AIT 8mm)
- AIT5002 (AIT 8mm)
- AIT5102 (AIT 8mm)



The library control hardware controls all operations in the Scalar 1000, including the interaction between the library and operator and the library and the host. The library control firmware creates and maintains the Scalar 1000 configuration, the physical location of the cartridge accessor, and the inventory of cartridges.

Cartridge Storage

The Scalar 1000 contains cartridge storage cells in all attached modules in addition to any tape drives installed. The control module must be the first frame in the library.

Table 2-2 shows the coordinates for the storage cells for libraries with Firmware 2.24 or earlier installed.

Table 2-2 Storage Cell Coordinates for Firmware 2.24 or Earlier

Frame	Column	Row
01 - 04	A - E	01 - 63

The Frame number can be from 1 to 4, the Columns are letters A-E in each module, the Rows are numbered from top to bottom (1 to 42 for half-inch and DLT cartridges and 1 to 63 for 8mm cartridges).

For libraries with Firmware level 2.3 or higher, use the following coordinate system to locate different elements (storage cell, drive, etc.) within the library. Refer to Table 2-3 on page 2-8.

Subsystem Description 2-7

 Table 2-3
 Element Coordinates for Firmware 2.3 or higher

Element Type	ID	Frame (Module)	Section	Column	Row
Storage	S	01 - 04	1 - 4	A - E	01 - 18
I/E Station	I	01	1	A	01 - 18
Drives	D	01 - 04	1 - 2	A - B	01 - 06

The Element Type can be *I* for I/E Station, *D* for Drive, and *S* for Storage. The frame number can be from 1 to 4. The Sections are numbered, for storage, from 1 to 4 top to bottom, and for drives, 1 to 2 bottom to top. The Columns are letters A-E in each section, the Rows are numbered 1 to a maximum of 18 from top to bottom depending on the section. Refer to Figure 2-2 on page 2-9.

2-8 Description 600561-A

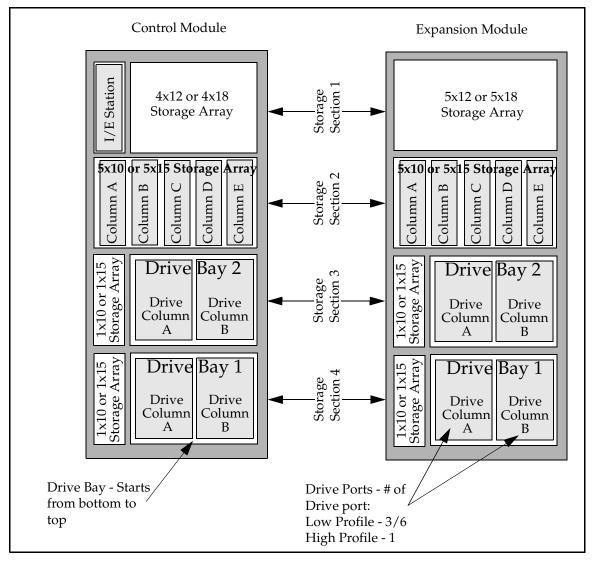


Figure 2-2 Coordinate System

Figure 2-2 on page 2-9 shows additional information that can be used to identify various fields in the coordinate system.

The Scalar 1000 contains cartridge storage cells in all the attached modules as follows:

- For the half inch/DLT module configuration, refer to Figure 2-3 on page 2-10.
- For the 8mm module configuration, refer to Figure 2-4 on page 2-11.

Subsystem Description 2-5



Figure 2-3 Half Inch Storage Cell

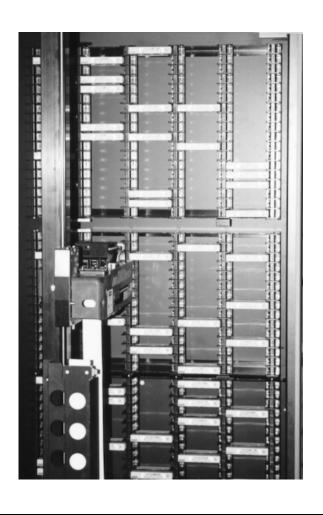


Figure 2-4 8mm Storage Cell

To manipulate the media within the library, the host must reference each movement with source and target designations. This is done via element addressing, which specifies precisely which cells within the library are to be used. Toward that end, the following addressing scheme will be used for the library. Refer to Table 2-4 on page 2-12 for libraries with firmware 2.3 or below and Table 2-5 on page 2-12 for libraries with firmware 3.0 or higher.

Subsystem Description 2-1

 Table 2-4
 Library Element Indexing for Firmware 2.30 or Below

Element Type	Indexing Range	
	Half-Inch	8mm
Storage	0 - 787	0 - 1181
Insert/Eject Station	788 - 799	1182 - 1199
Drives	800 - 847	1200 - 1247
Cartridge Accessor	848	1248

 Table 2-5
 Library Element Indexing for Firmware 3.0 or Higher

Element Type	Indexing Range
Storage	0 - 1181
Insert/Eject Station	1182 - 1199
Drives	1200 - 1247
Cartridge Accessor	1248



The cartridge accessor identifies and moves cartridges between the storage cells, tape drives and Insert/Eject Station. See Figure 2-5 on page 2-13.

2-12 Description 600561-A



Figure 2-5 Gripper

The cartridge accessor has:

- A gripper assembly for mounting a cartridge gripper, and a barcode scanner.
 - A cartridge gripper picks and places cartridges in storage cells, tape drives or the Insert/Eject station.
 - A barcode scanner reads the external labels on the cartridges. The barcode scanner is used during the inventory and teach processes.
- A horizontal axis drive for moving the gripper assembly the length of the rails in the Control Module and the Expansion Modules.
- A vertical axis drive for moving the gripper assembly vertically in the Control Module and the Expansion Modules.

Subsystem Description 2-13

Insert/Eject Station

The Insert/Eject Station allows insertion and ejection of cartridges without interrupting the normal operation of the library.

The I/E Station has a capacity of 12 half-inch cartridges or 18 8mm cartridges. For a Mixed Media library of half-inch and DLT cartridges, the top 6 slots of the Insert/Eject Station are reserved for half-inch cartridges and the bottom 6 slots are reserved for DLT cartridges. Refer to Figure 2-6 on page 2-14.

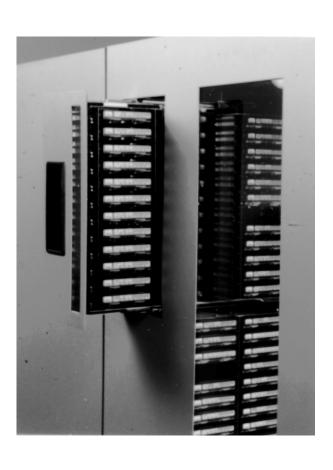


Figure 2-6 Insert/Eject Station

2-14 Description 600561-A

Tape Cartridge

Each tape cartridge in the Scalar 1000 must have an external label that is operator and machine readable to identify the bar code (BC) number. The external label contains a minimum of 5 characters and a maximum of 16 characters for the BC depending on the operating modes.

The Scalar 1000 can operate in one of three modes:

- Default Mode 6 characters
- Mixed Media Mode 6 characters, plus a media identifier
- Extended Mode 5 to 16 characters, may include media identifiers and checksum values.

The BC is composed of uppercase A-Z characters and numeric 0-9 characters. The Scalar 1000 currently supports Code 39 and Storage Technology type labels.

In Mixed Media mode, a separate seventh character label must be used to identify the cartridge type. The cartridge type is a single character that is either separate from or included with the BC label as follows:

- The separate character 1 is used to identify the Model 3480 cartridge.
- The separate character E is used to identify the Model 8490, and IBM 3490E cartridges.
- The separate character J is used to identify the IBM 3590 cartridge.
- The separate character M is used to identify the Plasmon NCTP cartridge.
- The characters C, D, and E are used to identify the Model 4001, Model 4001S, Model 7001, Model 7001S, and Model 8001S cartridges where C means DLT CompacTape III, D means DLT CompacTape IV, and E means DLT CompacTape IIIXT. The C, D, or E character is included on the same label with the six character BC.
- 8mm media bar code labels do not support a media identifier at this time. However, the Scalar 1000 designates the character A as a media identifier for reporting purposes.

For additional information, refer to *Barcode Labels* on page 6-7.

Tape Cartridge 2-15

Cartridge Storage and Tape Drive Configurations

The Scalar 1000 consists of a Control Module and up to 3 Expansion Modules.

Cartridge storage quantity varies by number of modules and tape drives in the modules. Table 2-6 lists the quantity of media contained by the storage cells for the Control Module and Expansion Modules configured for the different media types.

Table 2-6 Scalar 1000 Configurations

Frame	8490, 8590, 3590, NCTP Tape Drives	8490, 8590, 3590, NCTP Cartridge Capacity	8mm Tape Drives	8mm Cartridge Capacity	DLT Tape Drives	DLT Cartridge Capacity
Control Module	1 to 2 3 to 4	158 118	2 to 12	237	1 to 6 7 to 19	158 118
Control Module and 1 Expansion Module	1 to 2 3 to 4 5 to 6 7 to 8	368 328 288 248	2 to 12 14 to 24	552 432	1 to 6 7 to 12 13 to 18 19 to 24	368 328 288 248
Control Module and 2 Expansion Modules	1 to 2 3 to 4 5 to 6 7 to 8 9 to 10 11 to 12	578 538 498 458 418 378	2 to 12 14 to 24 26 to 36	867 747 627	1 to 6 7 to 12 13 to 18 19 to 24 25 to 30 31 to 36	578 538 498 458 418 378
Control Module and 3 Expansion Modules	1 to 2 3 to 4 5 to 6 7 to 8 9 to 10 11 to 12 13 to 14 15 to 16	788 748 708 668 628 588 548 508	2 to 12 14 to 24 26 to 36 38 to 48	1182 1062 942 822	1 to 6 7 to 12 13 to 18 19 to 24 25 to 30 31 to 36 37 to 42 43 to 48	788 148 708 668 628 588 548 508

When mixing high profile drive technology with DLT, the Control Module must be configured for high profile drive technology while DLT will consume separate expansion modules.

Optional Features

Optional features for the Scalar 1000 are as follows:

- ADIC Fibre Channel Router (FCR)
- Dual DC Power Supplies

Optional Features 2-17

2-18 Description 600561-A

3

Safety

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3-2 Safety 600561-A

Overview

In addition to the safety instructions in this guide, local and professional safety rules apply. Avoid dangerous situations while operating the Scalar 1000 by following all safety procedures and operating the equipment carefully. Read and follow all instructions in this guide.

It is mandatory that operators of the Scalar 1000 library understand and comply with all instructions contained in this guide and other related documentation.

Intended Use

This equipment is designed for processing:

Magnetic tape cartridges

Any other application is not considered the intended use. ADIC shall not be held liable for damage arising from unauthorized use of the library. The user assumes all risk in this aspect.

Hazard Alert Messages

ADIC classifies hazards in several categories. Table 3-1 shows the relationship of the symbols, signal words, actual hazards, and possible consequences.

Table 3-1 Hazard Alert Message

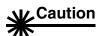
Symbol	Damage to	Signal Word	Definition	Consequence
		DANGER	Imminent hazardous situation	Death or serious injury
∱	Persons	WARNING	Potential hazardous situation	Possible death or serious injury
		CAUTION	Less hazardous situation	Possible minor or moderate injury
4	Persons		Imminent hazardous electrical situation	Death or serious injury

01 Aug 2000

Table 3-1 Hazard Alert Message

Symbol	Damage to	Signal Word	Definition	Consequence
\triangle	Material Person	Caution Warning	Potential damaging situation Potential hazardous	Possible damage to the product or environment Possible death or
		Warning	situation	serious injury
&	Material	Static Sensitive	Potential electronic damaging situation	Possible damage to the product
		Note	Tips for operators	No hazardous or damaging consequences
•			Important or useful information	No hazardous or damaging consequences

4









Specially emphasized paragraphs in this guide warn of danger or draw attention to important information. These paragraphs and their associated symbols include:

The danger exists of a fatal electric shock. At places designated with this symbol, electrical current can be present. Before starting any work, always confirm that all electrical connections are free of electrical current.

This symbol indicates the presence of a laser.

Caution - use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

When used with the signal word Warning, this symbol warns of a dangerous situation that threatens personnel with serious injury or death.

When used with the signal word Caution, this symbol means that specific regulations, rules, notices, and working procedures must be observed. Ignoring this symbol can lead to equipment damage or destruction or to other property damage.

This symbol indicates that the risk of equipment damage exists due to static discharge.



This symbol draws attention to user tips. No dangerous or damaging consequences for personnel or property are associated with this symbol.

This symbol indicates important or useful information. No dangerous or damaging consequences for personnel or property are associated with this symbol.

Area of Application



Other manufacturer documentation is an integral part of the Scalar 1000 documentation set. This information applies to the entire Scalar 1000 family. Further safety instructions for components used in the equipment are not invalidated by these instructions.

Protective Devices

The Scalar 1000 is equipped with the following protective devices:

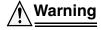
- Monitored access to the library
- Main Power Switch

Library Access

The Scalar 1000 is completely surrounded by an enclosure. The library can only be accessed through monitored access door(s).

The enclosure around the library separates the danger area of the Scalar 1000 library from the normal working area. The danger area of the library is the area in which personnel can be injured by component movements.

Movements of mechanical components in the library can cause serious injury. Access to the library is restricted to authorized personnel only.



Mechanical Lock

The library access door(s) can only be opened with a key from the outside. Authorized personnel are responsible for the security of the key.

O1 Aug 2000 Area of Application 3-5

Main Power Switch

Switching off the Main Power Switch removes all power and causes the movement electronics to shut off. All movements of the accessor stop immediately. In case of danger to personnel or property, immediately switch off the Main Power Switch.



Except in emergencies, stop the Scalar 1000 with the normal shutdown procedure before switching off the Main Power Switch. ADIC is not responsible for damage caused by improper use of the Main Power Switch. Such risk lies entirely with the user.



Movements of mechanical components in the Scalar 1000 can cause serious injury. Before turning the Main Power Switch on and restarting the Scalar 1000, confirm that no danger exists to personnel or property.

3-6 Safety 600561-A

4

Operation

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Scalar 1000 Startup
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Normal Shutdown
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4-2 Operation 600561-A

Overview

Normally, the host issues commands to the Scalar 1000. Operator control is provided via the Operator Panel. The Operator is responsible for:

- Starting the Scalar 1000
- Shutting down the Scalar 1000
- Handling Media

Refer to *Inserting Media* on page 6-3 and *Ejecting Media* on page 6-4 for media handling procedures. In the case of equipment failures, the operator can perform media processing.

Operator Panel

The Operator Panel provides an interactive path between the Operator and the Scalar 1000. Visual indicators and push-buttons enable the Operator to control the Scalar 1000. Refer to Figure 4-1 on page 4-4 for an illustration of the Operator Panel.

01 Aug 2000 Coeroiew 4-3

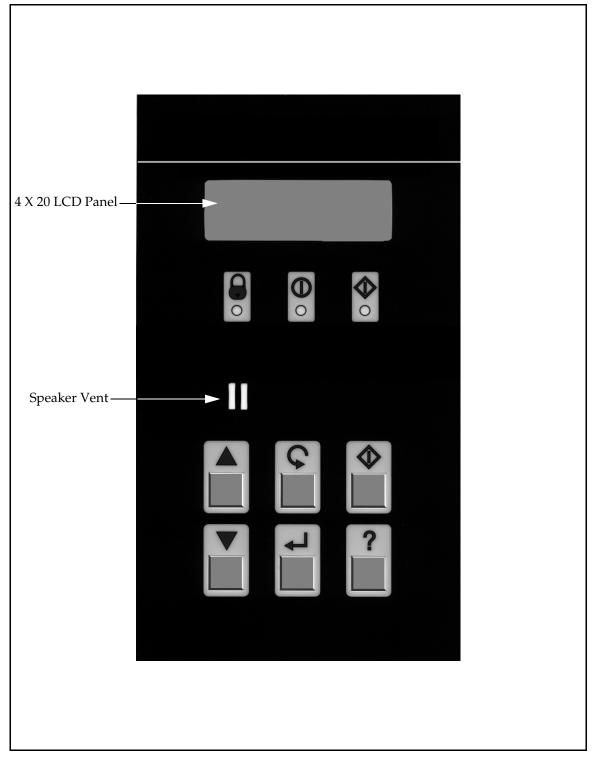


Figure 4-1 Operator Panel

Table 4-1 provides an illustration and description of the push buttons associated with the Operator Panel.

 Table 4-1
 Operator Panel Push Buttons

Push button	Description
	 The Up Arrow push button can be used to: scroll the display to show previous line(s). move the cursor to an item before the current item when selecting an option, selection is represented by the character >. increment the current value to the next value when used in an entry field.
	 The Down Arrow push button can be used to: scroll the display to show next line(s). move the cursor to an item after the current item when selecting an option, selection is represented by the character >. decrement the current value to the previous value when used in an entry field.
	 The Enter push button can be used to: select the current option as the next action to be performed by the library, the selected option will be preceded by the character >. act as a TAB button to the next required entry field when multiple field entries are being entered. In this case, the button will cycle through all the entry locations until the Accept option is chosen (with Y).
	The Escape push button can be used to: • leave the current display and return to the previous display, if it exists. • move from the Initial Screen to the Main Menu.
?	 The Help push button can be used to: display help text for the current selected item if available. In this mode, the Arrow buttons can be used to scroll through the help text and the Escape button is used to exit the help display.

Operator Panel 4-5

Table 4-1 Operator Panel Push Buttons (Continued)

Push button	Description
	The Ready push button can be used to:
	transition the library from a Ready state to NotReady or NotReady to the Ready state.

Holding down the push buttons will cycle through the options. The longer the push button is held down, the faster it will cycle.

Table 4-2 provides an illustration and description of the visual indicators on the Operator Panel.

Table 4-2 Operator Panel Visual Indicators

Indicator	Description
0	The Locked indicator is illuminated when the Insert/Eject Station is locked. While locked, no media may be added or removed through the Insert/Eject Station.
O	The Power On indicator indicates that power is applied to the Scalar 1000 module.
◆	The Ready indicator illuminates when the Scalar 1000 is ready to accept commands and execute accessor movements.

The meaning of the special characters displayed on the Operator Panel are as follows:

- > When this character precedes the option, the option is available for selection. Pressing the selects the option. Pressing the selects the option. Pressing the selects the option. Pressing the selects between the respective previous or next option.
- ... When these characters follow the option, additional options or status displays are presented after the selected option.
- When this character follows the option, additional menus are available under the selected option.
- When this character follows the option, scroll predefined values with the and buttons for the selected option.
- ^ When this character appears below that option, scroll predefined values with the ▲ and ▼ buttons for the selected option.

Operator Panel 4-7

Remote Management Unit (RMU)

The RMU resides in each system and is pre-installed at the factory. (Please contact ADIC for pricing and installation on this option for all chassises manufactured prior to August 2000.) The RMU allows remote access via a Web browser to the library. The RMU supports Microsoft Internet Explorer version 4.0 and above, as well as Netscape Navigator versions 4.01, 4.5, and 4.73. All available functions, as described below, are accomplished without the need of a dedicated server (or separate software).

The RMU performs the following functions:

- Allows the user to quickly access the status of the system, including library and drive conditions, firmware levels and other useful information.
- Provides remote operation of all library Operator Panel (LCD) functions via the Web browser.
- Updates firmware in the RMU and the library's controller.
- Supports Simple Network Management Protocol (SNMP) version 2.0 and acts as an SNMP-server, generating SNMP traps and responding to SNMP requests.
- Acquires Tape Alert 3.0 compatibility information from the library over the serial interface port and sends that information to a SNMP server.
- Detects a power loss and generates a SNMP trap for notification.
- Allows for the retrieval of the library command and error logs and the RMU error log.
- Allows an administrator to make configuration changes such as network, users, and date/time changes.
- Provides on-line access to Scalar 1000 documentation.

Refer to *RMU Submenu* on page 5-93 for additional information.

If the RMU is an upgrade to an existing chassis and is installed into the Scalar 1000 by anyone other than an ADIC authorized service representative, the 3 year RMU warranty and 1 year chassis warranty is void.



4-8 Description

System Administrator Responsibilities

The System Administrator (SA) must setup the RMU for proper operation. The SA responsibilities includes establishing a network address for the RMU and establishing the Uniform Resource Locators (URL). The network address consists of an Internet Protocol (IP) address, subnet mask, and gateway IP Address. Refer to *RMU Submenu* on page 5-93 for information about setting the network address via the Operator Panel. After the network address has been established, the SA should test the RMU and URL via a Web browser. Once the URL has been verified and accounts have been created, the SA can broadcast the URL address to the potential RMU users. The SA can delete users and change any user password.

Menu Structure Description

The RMU startup dialog, Figure 4-2 on page 4-11, is divided into two navigation frame segments and a single information frame segment. The first of three illustrated segment descriptions is the left navigation frame. The left navigation frame has six hyperlinks as indicated in the following list:

- Logout
- Contents
- Documentation
- Support
- Version
- www.adic.com

Refer to *Left Navigation Frame* on page 4-12 for the dialogs and hyperlink descriptions.

The second segment is the top information frame. There are no hyperlinks or subsequent dialogs for this frame. One field value associated with this frame follows:

URL identifier and equipment type

Refer to *Top Information Frame* on page 4-17 for the dialog.

The third segment is the center navigation frame. The center navigation frame has six tab style hyperlinks as indicated in the following list:

- Status
- Configuration
- Firmware
- Diagnostic file

- Operator Panel
- Logs

The Status Tab is an open dialog. The remaining five tabs, which are password protected. These tabs require a valid user or administrator account and a successful login.

Refer to *Center Navigation Frame* on page 4-18 for the dialogs and hyperlink descriptions.

4-10 Description 600561-A

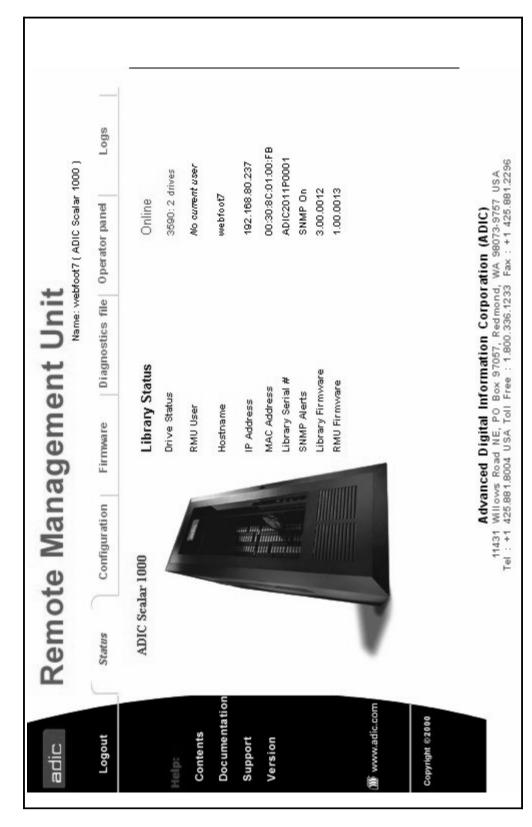
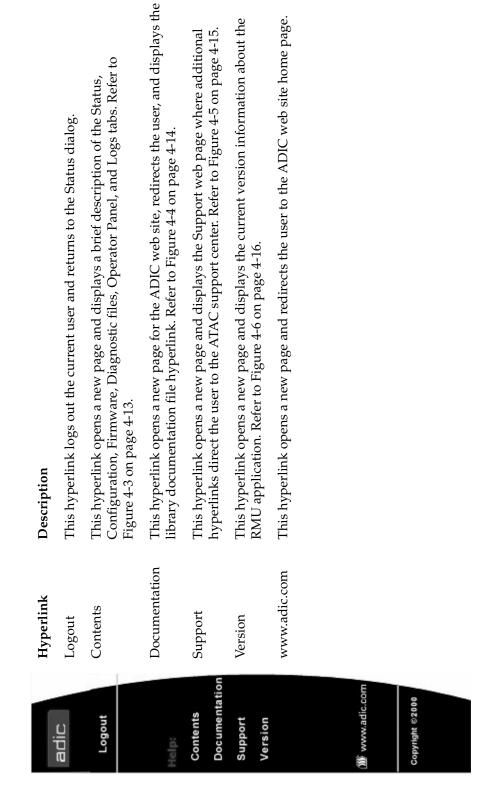


Figure 4-2 Startup Display

Left Navigation Frame

The Left Navigation Frame dialog and descriptions are indicated below.



4-12 Description 600561-A

adic

Remote Management Unit (RMU) Help Content:

Status

The status page shows the current status of the Remote Management Unit, the attached library, and any drives within that library. From this page the user can easily see if there are any problems with the system.

• Configuration (Password Protected)

The configuration page allows the user to configure the Remote Management Unit. Network configuration (including SNMP), user configuration, and date/time setup are all on this page.

• Firmware (Password Protected)

The firmware page allows the user to update the firmware on both the Remote Management Unit and the attached library.

• Diagnostic Files (Password Protected)

The diagnostic files page allows the user to up load (to their local computer) the diagnostic information from the attached library that may be useful to service personnel in diagnosing problems. Both information from the library (command and error logs) and information from the RMU (error log) can be retrieved in text form. The system snapshot is a machine decodable file which can only be used by ADIC service personnel.

• Operator Panel (Password Protected)

The operator panel page is a direct interface to the attached library's operator panel. The user will see what is happening on the attached library and any interaction the user performs (button presses) will reflect both on this web page and the attached library.

• Logs (Password Protected)

The logs page shows the last few entries of the library's log. To see the entire log, please download it using the Diagnostic Files page.

Notes:

1. Usernames and passwords are case sensitive.

Figure 4-3 Help Content Dialog

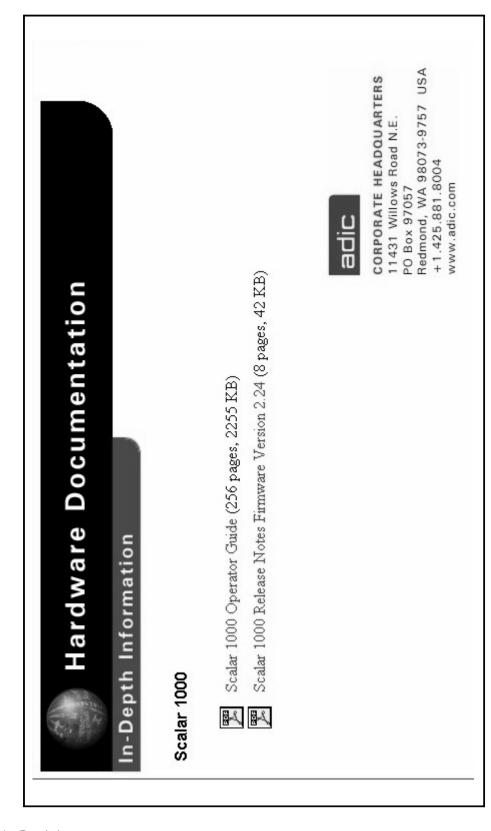


Figure 4-4 Scalar 1000 Documentation Files Dialog

-14 Description 600561-A

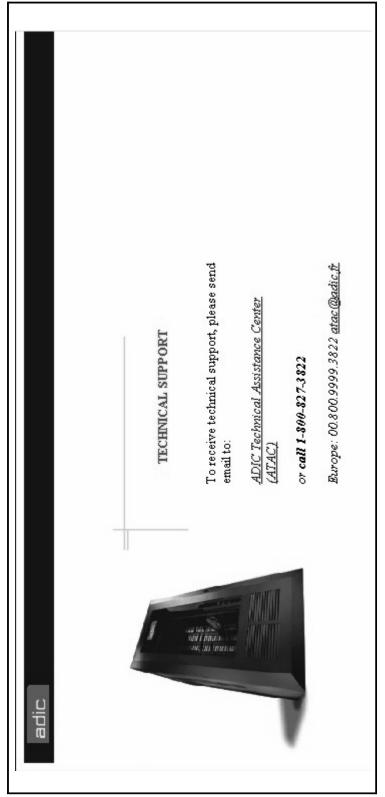


Figure 4-5 Technical Support Dialog

Hyperlink	Description
ADIC Technical Assistance Center	This hyperlink opens an email dialog to ADIC technical support center for North America.
atac@adic.fr	This hyperlink opens an email dialog to ADIC technical support center for the remainder of the world.

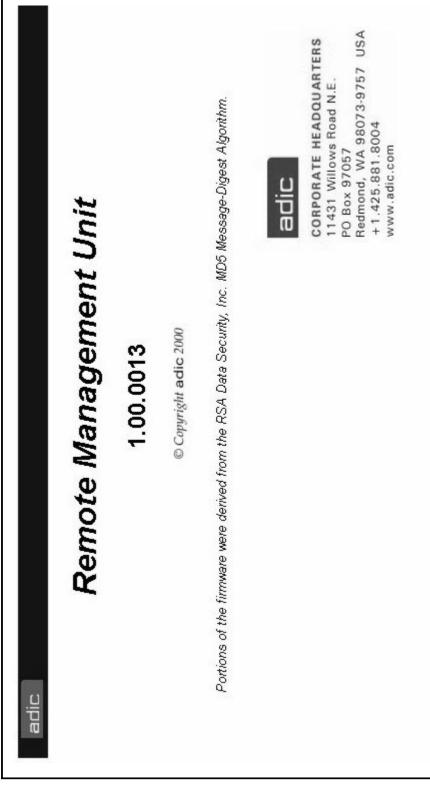


Figure 4-6 Version Dialog

-16 Description 600561-A

Top Information Frame

The Top Information Frame dialog and description are indicated below.

Remote Management Unit

Name: webfoot5 (ADIC Scalar 1000)

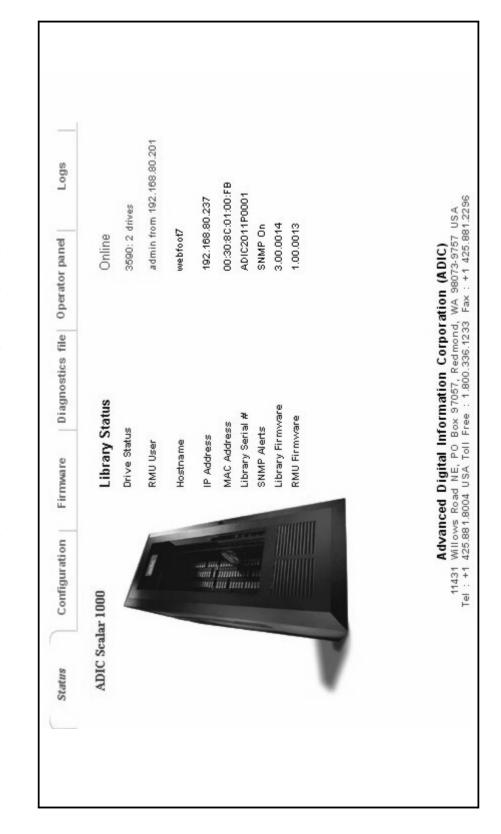
Hyperlink Description

Name

This location indicates the URL identifier of the RMU site and the attached library type.

Center Navigation Frame

All of the Center Navigation Frame dialogs and descriptions, beginning with Status, are indicated below.



4-18 Description 600561-A

Description Hyperlink The Status tab displays the current summary status of the library. This tab is active even when a user is not logged into the RMU. The tab is not password protected. The fields and values that are associated Status

with this tab are indicated below. This screen is refreshed periodically to reflect the current states.

This field indicates the current online/offline library status. Library Status

This field value indicates the type and quantity of tape drives currently installed in the attached library. Drive Status

This field value indicates the name and location of the current user. RMU User

This field value indicates the Hostname used for the RMU connection. Hostname This field value indicates the Internet Protocol (IP) address for the RMU connection. IP Address

This field value indicates the MAC address of the RMU. This is also the serial number of the RMU. **MAC Address**

This field value indicates the library serial number. Library Serial# This field value indicates the state of the SNMP Alert notification. This value is either On/Off. SNMP Alerts

This field value indicates the current level of library firmware. Library Firmware

This field value indicates the current level of RMU firmware. RMU Firmware Clicking any tab, other than the Status tab, initiates a Login dialog. Refer to Figure 4-7 on page 4-20.

No regular user can log into the RMU while an existing Admin user is logged into the RMU. Only one regular user can be logged into the RMU at a time.



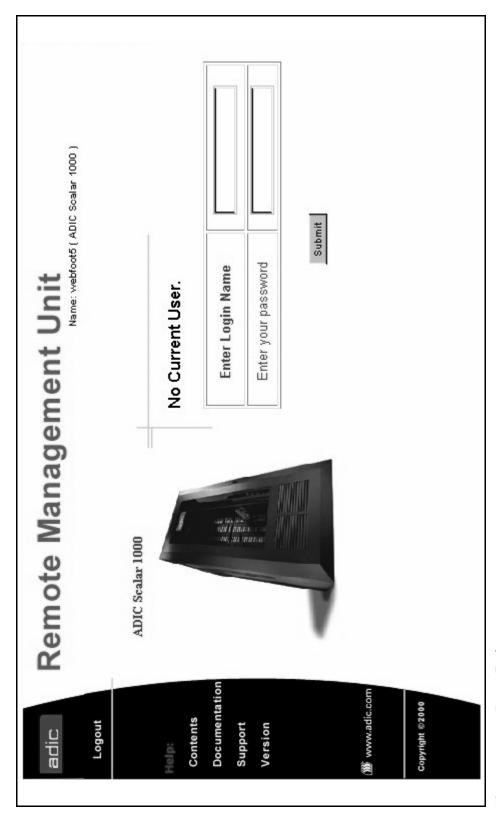


Figure 4-7 Login Dialog

4-20 Description 600561-A

Field Description

Enter Login Name The user enters his/her user name.

Enter your password The user enters his/her password.

Submit

The user submits the name and password for login verification. If either user name or user password are not verified, the login is reject.

No regular user can log into the RMU while an existing Admin user is logged into the RMU. Only one regular user can be logged into the RMU at a time. The RMU is a direct interface to the attached library. The user will see what is happening on the attached library and any interaction the user performs (button presses) will reflect both on this web page and the attached library.



Name: webfoot5 (ADIC Scalar 1000) Logs Change User Password Delete User User Configuration Diagnostics file Operator panel anson Date and Time 14:05 Create User 05/10/00 No Action No Action Remote Management Unit Edit New Select Reset Management Action Re-enter Password (www/dd/yy/) User Name Password Time (hh:mm) Date Submit Configuration Firmware Network Configuration ٠ OFF • 9FF 192,168,80,235 255.255.255.0 192.168.80.1 0.0.0 webfoot5 Status Hostname IP Address Subnet Mask Gateway SNMP SNMP DHCP Documentation 🐺 www.adic.com Copyright ©2000 Contents Logout Support Version adic

The Configuration dialogs and descriptions are indicated below.

Figure 4-8 Configuration Dialog

Hyperlink Description

The Configuration tab displays the current configuration status of the RMU and user account. The Configuration

fields and values that are associated with this tab are indicated below.

This field value indicates the Hostname used for the RMU configuration.

Hostname

DHCP

This field value allows enabling/disabling DHCP as the protocol for assigning dynamic IP

addresses. The value is either On/Off.

This field value indicates the Internet Protocol (IP) address for the RMU connection.

This field value indicates what subnet an IP address belongs to.

This field value indicates the Gateway address used for RMU communication. Gateway This field value indicates the state of the SNMP Alert notification. The value is either On/Off.

SNMP Server This field value indicates the SNMP server address.

SNMP Alerts

Subnet Mask

IP Address

This pull down menu allows the user to select the type of action to be accomplished. Management Action

No Action This selection indicates that no change should be made.

This selection indicates that a new user is to be created. This can only be done by the SA. Create User

This selection indicates that the user password will be changed. Change User Password This selection indicates that the current user will be deleted. This can only be done by the SA. Delete User

This section allows the user to perform management actions on the user selected

Edit New This section allows the user to enter a new User Name.

This pull-down menu allows the user to select a user name that has already been created. Only the Select One

current user name is listed unless the SA is logged on.

User Name

Password The user enters his password.

Re-enter Password The user types his password in again for verification.

Date (mm/dd/yy) This field value allows the user to change the current date.

Time (hh:mm)

This field value allows the user to change the current time.

The user submits the configuration data for verification and allows the user to confirm any

configuration changes.

Submit

Reset

This button will clear all the changed fields.

If the user changes the configuration, the Confirm Configuration Changes dialog appears. This dialog displays the old configuration. Refer to Figure 4-9 on page 4-25.

4-24 Description 600561-A

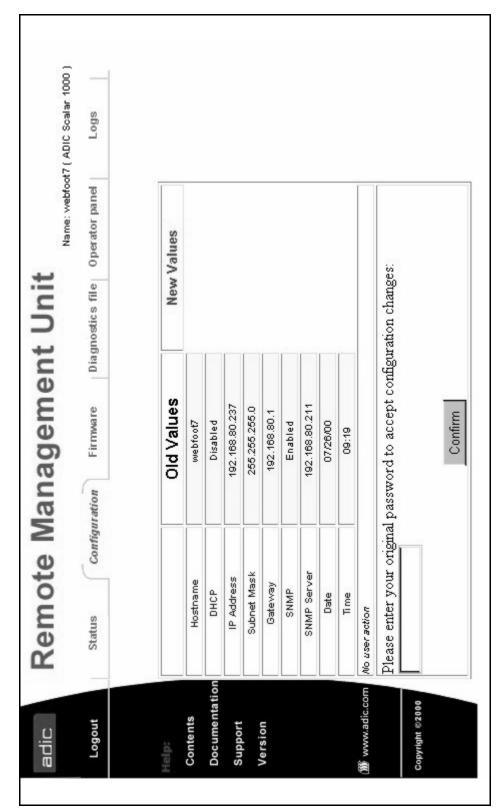


Figure 4-9 Confirm Configuration Changes Dialog

Hyperlink

Description

Password The user must enter their password.

This button confirms the configuration changes.

When the user enables DHCP, the DHCP Enabled dialog is displayed. Refer to Figure 4-10 on page 4-27.

4-26 Description

Confirm

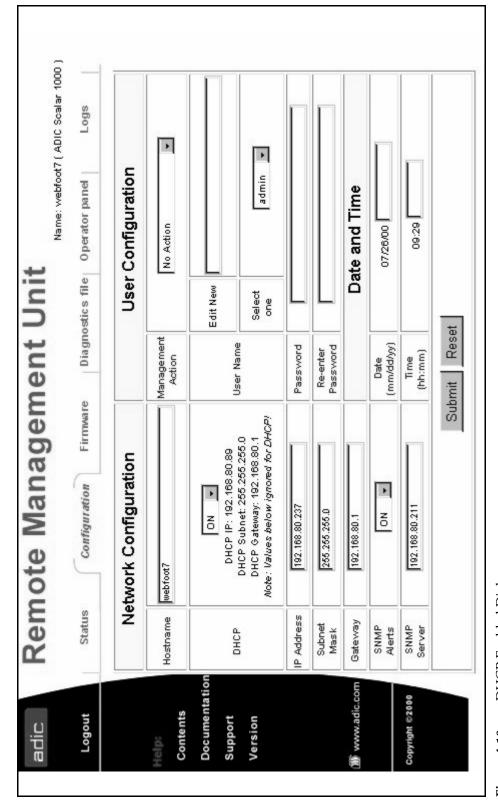


Figure 4-10 DHCP Enabled Dialog

Name: webfoot5 (ADIC Scalar 1000) Logs Diagnostics file Operator panel Please note that this could take a couple of Browse... minutes to send to the RMU. Select target for update Update Library Firmware Update RMU Firmware Select firmware file Update Firmware Remote Management Unit Firmware Configuration an i mum. ADIC Scalar 1000 Status Documentation www.adic.com Copyright ©2000 Logout Contents Version Support adic

The Firmware dialog and descriptions are indicated below.

Figure 4-11 Firmware Dialog

Hyperlink Description

The Firmware tab updates the firmware version of the RMU or the library. The fields and values that Firmware

are associated with this tab are indicated below

This section allows the user to select which firmware is to be upgraded. Select target for update This section allows the user to select or browse to find the firmware upgrade file. Select firmware file

When this button is clicked, the upgrade firmware process is started. Update Firmware



The RMU is a direct interface to the attached library. The user will see what is happening on the attached library and any interaction the user performs (button presses) will reflect both on this web page and the attached library.

Name: webfoot5 (ADIC Scalar 1000) Logs Operator panel Retrieves the specified diagnostic couple of minutes to retrieve from the Please note that this could take a Select the file to retrieve Library Command Log Retrieve selected file Remote Management Unit Diagnostics file information. Library Error Log library. RMU Error Log Firmware Configuration ADIC Scalar 1000 Status Documentation www.adic.com Copyright \$2000 Contents Logout Support Version adic

The Diagnostic file dialog and descriptions are indicated below.

Figure 4-12 Diagnostics File Dialog

4-30 Description

Description Hyperlink

The Diagnostic files tab displays the library command error log, library error log, or RMU error log. The fields and values that are associated with this tab are indicated below: Diagnostic file

This selection allows the user to choose which log to retrieve. Select the file to

After selecting the log, click on this button to retrieve the log file. Retrieve selected files

retrieve

Logs Name: webfoot5 (ADIC Scalar 1000) Diagnostics file Operator panel SCREEN 13:31:50 Online.....Ready Ready 핖 READY Remote Management Unit Idle Power ENTER MAIN 05/10/00 IE Locked NEXT Configuration Firmware ADIC Scalar 1000 Status Documentation Copyright ©2000 Contents Logout Support Version adic

The Operator panel dialog and descriptions are indicated below.

Figure 4-13 Operator Panel Dialog

Hyperlink Description

The Operator panel tab displays the library operator and duplicates operator panel functionality. Access to this menu does not lock out the library's front panel. The current state of the library menu is echoed and Operator panel

continuously refreshed on the display. The fields and values that are associated with this tab are indicated below

Previous The Previous button can be used to:

scroll the display to show previous line(s)

• move the cursor to an item before the current item when selecting an option, selection is represented by the character >

increment the current value to the next value when used in an entry field

Escape The Escape button can be used to:

leave the current display and return to the previous display, if it exists

• move from the Initial Screen to the Main Menu

Ready The Ready button can be used to:

• transition the library from a Ready state to NotReady or NotReady to the Ready state

The Next button can be used to:

Next

scroll the display to show the next line(s)

· move the cursor to an item after the current item when selecting an option, selecting is represented by the

decrement the current value to the previous value when used in an entry field

The Enter button can be used for:

select the current option as the next action to be performed by the library, the selected option will be proceeded by the character >

acts as a TAB button to the next required entry field when multiple field entries are being entered. In this case, the button will cycle through all the entry locations until the Accept option is chosen (with Y)

Enter

Help

The Help button can be used to:

• display help text for the current selected item if available. In this mode, the Previous and Next buttons can be used to scroll through the help text and the Escape button is used to exit the help display

4-34 Description

006 05 MC[0D11] GFC 00000000 G3 X=0A45,Y=060C-060C,Z=130 05/10/00 09:50:39.79 012 05 MC[0D10] PTC 00000000 G3 X=0A45,Y=060C.060C,Z=136 05/10/00 09:47:14.16 004 05 MC[0D12] PTC 00000000 G3 X=0300,Y=105F.105F,Z=133 05/10/00 09:50:42.62 014 05 MC[0D0F] GFC 00000000 G3 X=0300,Y=1055-1055,Z=125 05/10/00 09:47:12.35 sbo7 008 13 SCSIP1HO] MOV: MT[0000] S[0102] D[1014] I[F] 05/10/00 09:50:19.23 011 05 ENDMC[0D10]: PTC OK 00000A45,0000060C,137 05/10/00 09:47:16.98 003 05 ENDMC[0D12]: PTC 0K 00000300,0000105F,131 05/10/00 09:50:44.99 005 05 ENDINC(0D11]: GFC OK 00000A45,0000060C,25 05/10/00 09:50:42.61 013 05 ENDMC[0D0F]: GFC OK 00000300,00001055,25 05/10/00 09:47:14.14 Name: webfoot5 (ADIC Scalar 1000) 000 01 (00) RMU: Login 'schmin' (192.168.80.205) 05/10/00 13:30:47.94 **Current Command Log** Diagnostics file, Operator panel 009 13 SCSIDONE MOV: Status good 05/10/00 09:47:18:18 001 13 SCSIDONE MOV: States good 05/10/00 09:50:45.04 007 13 Move from 1202 to 20 05/10/00 09:50:19.27 010 13 Move result is 0, 05/10/00 09:47:18.16 002 13 Move result is 0. 05/10/00 09:50:45.02 Remote Management Unit Firmware Configuration ADIC Scalar 1000 Status Documentation www.adic.com Copyright ©2000 Logout Contents Support Version adic

The Logs dialog and descriptions are indicated below.

Figure 4-14 Logs Dialog

Hyperlink Description
Logs The Logs tab

The Logs tab displays the library logs.

4-36 Description

Scalar 1000 Startup



Use the following procedure to start the Scalar 1000.

With the RMU installed, Power Up must be delayed by at least 10 seconds after a power down condition to allow the RMU to properly shutdown.

- Step 1 Ensure that all doors are closed and mechanically locked on the Control Module and any Expansion Modules.
- Step 2 Locate the Main Power Switch at the lower right corner in the back panel door of the Control Module.
- Step 3 Push in the top of the rocker Main Power Switch on the Control Module. Repeat the process for any Expansion Modules.



Movements of mechanical components in the Scalar 1000 can cause serious injury. Before turning the Main Power Switch ON, confirm that no danger exists to personnel or property.



Power is applied to the Scalar 1000. The Control Module embedded software starts the boot process. The (Power On) indicator illuminates and the Initial Screen displays status.

The firmware initiates a self test procedure and an auto-configuration and inventory operation. After all firmware procedures are completed, the LCD screen on the Operator Panel displays the Initial Screen. The Initial Screen is illustrated by Figure 4-15.

MAIN SCREEN
MM/DD/YY HH/MM/SS
Idle
Online.....Ready

Figure 4-15 Initial Screen

Scalar 1000 Startup 4-37 01 Aug 2000

Scalar 1000 Shutdown

The Scalar 1000 may be shut down normally or by the Emergency Shutdown method.



Use the method described in *Emergency Shutdown* in cases of emergency only.

Normal Shutdown



To properly shut down the Scalar 1000 follow the procedure.

With the RMU installed, power up must be delayed by at least 10 seconds after a power down condition to allow the RMU to properly shutdown.

Step 1 If necessary, use the Subutton to return to the Main Menu. The selector defaults to the Mode selection. Press the screen, use the subutton. From the Mode screen, use the subutton to select the Shutdown mode.

Press the | **U** button.

The * moves to the Shutdown mode and the state automatically changes to Shutdown. The Accessor completes the current task and returns to the home position. The reboot message appears. See Figure 4-16.

The library may now be rebooted

Figure 4-16 Reboot Screen

Step 2 Locate the Main Power Switch at the lower right corner in the back panel door of the Control Module.

Step 3 Push in the bottom of the rocker Main Power Switch.

Power is removed from the Scalar 1000 Control Module.

Step 4 Repeat Step 2 and Step 3 for each additional Expansion Module.

Emergency Shutdown

Use the following procedure if an emergency situation arises.

<u> Attention</u>

Except in emergencies, stop the Scalar 1000 with the normal shutdown procedure before switching off the Main Power Switch. ADIC is not responsible for damage caused by improper use of the Main Power Switch. All risk lies entirely with the user.

<u>N</u>Caution

With the RMU installed, power up must be delayed by at least 10 seconds after a power down condition to allow the RMU to properly shutdown.

- Step 1 Locate the Main Power Switch at the lower right corner in the back door panel of the Control Module.
- Step 2 Push in the bottom of the rocker the Main Power Switch.

Power is removed from the Scalar 1000. All Accessor movements halt immediately.

Step 3 Repeat Step 1 and Step 2 for any additional Expansion Module.

Scalar 1000 Restart



Use the following procedure to restart the Scalar 1000.

With the RMU installed, power up must be delayed by at least 10 seconds after a power down condition to allow the RMU to properly shutdown.

- **Step 1** If applicable, correct any situations that required the Scalar 1000 shutdown.
- Step 2 Refer to *Scalar 1000 Startup* on page 4-37 for instructions on the Scalar 1000 start procedure.

Scalar 1000 Restart 4-35

4-40 Description 600561-A

5

Menus and Commands

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5-4 Menus and Commands

Overview

The Operator Panel provides a menu driven operator interface to the Scalar 1000. The menus allow selection of parameters and information regarding the status and current operating parameters of the Scalar 1000.

Using the Operator Panel Menu

Note

The information menus are not dynamically updated. To view changes, reselect the menu that was changed.

Each menu is accessible through the Operator Panel push buttons. Refer to *Operator Panel* on page 4-3 for an illustration and definition of the push buttons.

All menus and respective options are grouped according to function. Each respective option is preceded and/or followed by special characters. Figure 5-1 on page 5-6 shows the Operator Panel directory structure.

Overview 5-5
01 Aug 2000

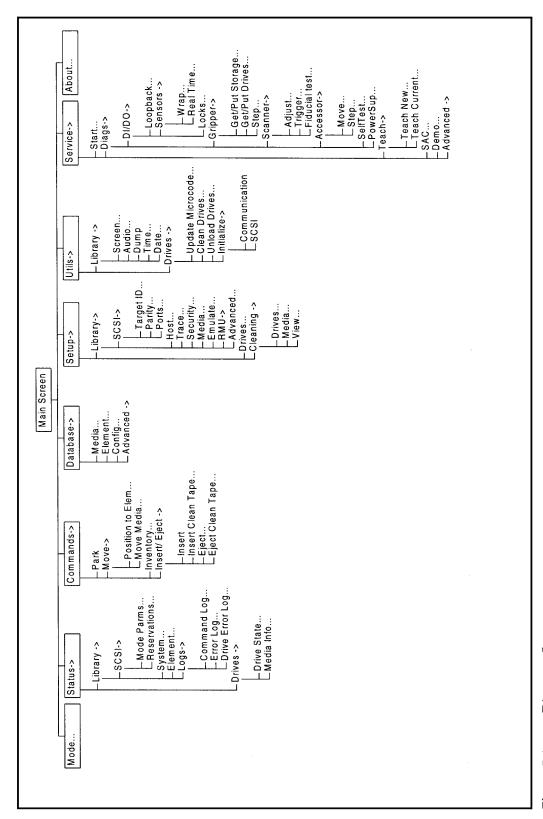


Figure 5-1 Directory Structure

Common Help Button

The Help key is common to all menus, submenus, dialogs, and screens. Using the Help key while the selection indicator (< or >) is at a desired location, provides informative text about that entry. To use the Help button, follow these steps.

- Step 1 If necessary, press the ▼ button or the ▲ button to position the selection indicator at the desired location.
- Step 2 Press the ? button to view the help text.

The help text appears.

Step 3 Press the \(\mathbb{C} \) button.

The previous menu appears with the selection indicator located at the default position.

Operator Intervention Message

If an error condition causes an operator intervention message to appear, refer to Table 7-3 on page 7-15.

Main Menu Selection



The button can always be used to escape to the previous menu.

The Main Menu is the first available menu after the Initial Screen displays. Refer to *Scalar 1000 Startup* on page 4-37 for information about the Initial Screen. To display the Main Menu from the Initial Screen or any other menu, press the button until the Main Menu appears. The Main Menu detaults to the Mode selection. All subsequent menus and options are selectable from the Main Menu. Eight options are available. See Figure 5-2 for an illustration of the Main Menu.

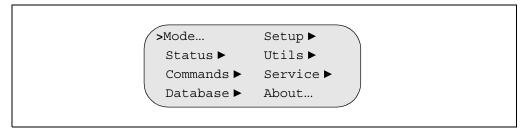


Figure 5-2 Main Menu

5-8 Menus and Commands

Mode Dialog Selection

The Mode Dialog is primarily used to change the operating mode of the Scalar 1000 for startup, shutdown, or diagnostic operations. Mode is selected from the Main Menu by following this procedure.

Step 1 If necessary, press the button until the Main Menu appears.

The Main Menu appears with the selection indicator positioned at Mode.

The Mode Dialog appears. See Figure 5-3. The first line of the Mode Dialog displays the current state.

Offline Ready >Online Ready Accept: N

Figure 5-3 Mode Dialog

To choose one of the selections, follow the steps.

Step 3 Press the button to select the current parameter value and move to the next parameter.

— or —

Parameters

Press the **V** button or the **b** button to toggle between the parameter values in the following list.

Values

Mode Online Note Offline If Shutdown is selected for the Shutdown Mode parameter, State Ready Shutdown is NotReady automatically displayed for the Y to accept changes Accept State parameter. N to reject changes

01 Aug 2000 Mode Dialog Selection 5-

Press the button to confirm the change.

Step 4 Repeat Step 3 for the desired parameters in the list.

When toggling between the Ready and NotReady states, the following two screens, refer to Figure 5-4 on page 5-10 and Figure 5-5 on page 5-10, appear. When Shutdown is selected, the Shutdown Screen appears. See Figure 5-6.

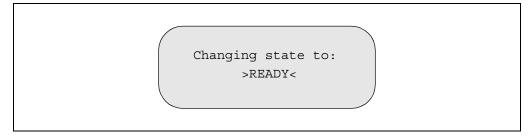


Figure 5-4 Ready Screen

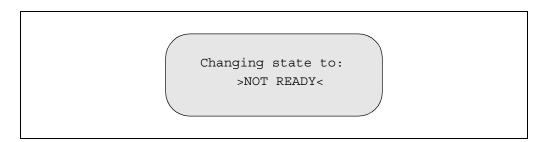


Figure 5-5 NotReady Screen

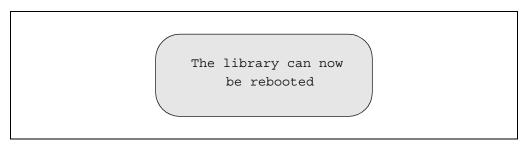


Figure 5-6 Shutdown Screen

Table 5-1 details the state and mode descriptions available under the Mode screen.

5-10 Menus and Commands 600561-A

 Table 5-1
 Operating State and Mode

State	Mode	Description
Ready	Online	The normal host controlling condition. Host commands are processed.
	Offline	The normal operator controlling condition. Operator commands are processed. Most host commands are not processed.
Not Ready	Online	Aisle power is not present. Host commands not involving the accessor are processed.
	Offline	Aisle power is not present. Most operator and host commands are not processed.
Shutdown	Shutdown	Allows the operator to properly shutdown the library. All commands issued by the host are completed, and no other commands are accepted.

Mode Dialog Selection 5-12

Status Menu Selection

The Status Menu is primarily used to provide various operating statistics. Status is selected from the Main Menu by following this procedure.

Step 1 If necessary, press the button until the Main Menu appears.

The Main Menu appears with the indicator positioned at Mode.

- Step 2 Press the button or the button to position the selection indicator at Status.

The Status Menu appears. This menu offers two selections. See Figure 5-7. The Status Menu defaults to the Library selection.

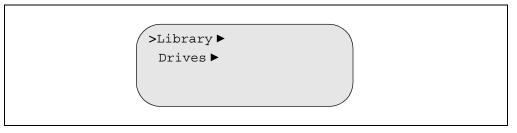


Figure 5-7 Status Menu

To choose one of the two selections, follow the steps.

Step 4 Press the button to select the Library Submenu.

— or —

Press the **v** button or the **b** button to select the Drives Submenu.

Press the $\begin{tabular}{ll} \begin{tabular}{ll} \begin{tabular}$

The selected menu appears. Refer to Library Submenu on page 5-13 or Drives Submenu on page 5-37.

Library Submenu

When Library is selected, the Library Submenu is displayed. This submenu offers four selections. See Figure 5-8. The Library Submenu defaults to the SCSI selection.

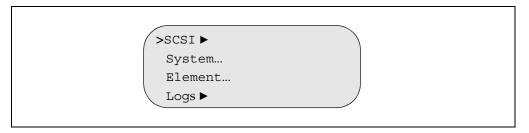


Figure 5-8 Library Submenu

To choose one of the four selections, follow the steps.

Step 1 Press the

button to select the SCSI Submenu. .

- or
Press the

button or the

button to select the System Dialog, Element Dialog, or Logs Submenu.

Press the

button.

The selected screen appears. Refer to SCSI Submenu on page 5-14, System Dialog on page 5-26, Elements Dialog on page 5-28, or Logs Submenu on page 5-32.

Status Menu Selection 5-13

SCSI Submenu

When SCSI is selected, the SCSI Submenu is displayed. This submenu offers two selections. See Figure 5-9. The SCSI Submenu defaults to the Mode Parms selection.

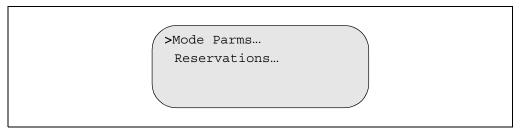


Figure 5-9 SCSI Submenu

To choose one of the two selections, follow the steps.

Step 1 Press the Dialog.

— or —

Press the Button or the Button to select the Mode Parms

Press the Button or the Button to select the Reservations Dialog.

Press the Button.

The selected menu appears. Refer to Mode Parms Dialog on page 5-15 or Reservations Dialog on page 5-24.

5-14 Menus and Commands 600561-A

Mode Parms Dialog

When Mode Parms is selected, the Mode Parms Dialog is displayed. See Figure 5-10. This option is used to view the changeable Mode Parameter pages. Refer to the document number 600974 Scalar 1000 SCSI Reference Manual for additional information about the Scalar 1000 Mode Parameters.

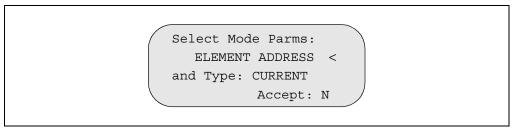


Figure 5-10 Mode Parms Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **V** button or the **b** button to toggle between the parameter values in the following list.

Parameters	Values
Mode Parms	Element Address Mixed Media Parity LCD
Туре	Current Default Saved
Accept	Y to accept changes N to reject changes

Press the
button to confirm the change.

Step 2 Repeat Step 1 for the desired parameters in the list.

If \mathbf{Y} is selected for the Accept parameter value, one of twelve response screens appears. Refer to Figure 5-11 on page 5-16 through Figure 5-22 on page 5-23. Otherwise, the changed parameters continue to display but no action is taken.

O1 Aug 2000 Status Menu Selection 5-15

Element Address

When Element Address is selected, the Element Address screen appears. Figure 5-11 shows the Element Address/Current Screen. Figure 5-12 shows the Element Address/Default Screen. Figure 5-13 on page 5-17 shows the Element Address/Saved Screen.

Base MT : 00001 Base ST : 04096 Base IE : 00016 Base DT : 00256

Figure 5-11 Element Address/Current Screen

Parameters	Values
Base MT	Current base address of the accessor
Base ST	Current base address of the Storage Cells
Base IE	Current base address of the Insert/Eject station
Base DT	Current base address of the tape drive(s)

Base MT : 00001
Base ST : 04096
Base IE : 00016
Base DT : 00256

Figure 5-12 Element Address/Default Screen

Parameters	Values
Base MT	Default base address of the accessor
Base ST	Default base address of the Storage Cells
Base IE	Default base address of the Insert/Eject station

Base DT Default base address of the tape drive(s)

Base MT : 00001 Base ST : 04096 Base IE : 00016 Base DT : 00256

Figure 5-13 Element Address/Saved Screen

Parameters	Values
Base MT	Saved base address of the accessor
Base ST	Saved base address of the Storage Cells
Base IE	Saved base address of the Insert/Eject station
Base DT	Saved base address of the tape drive(s)

Mixed Media

When Mixed Media is selected, the Mixed Media screen appears. Figure 5-14 shows the Mixed Media/Current Screen. Figure 5-15 on page 5-18 shows the Mixed Media/ Default Screen. Figure 5-16 on page 5-19 shows the Mixed Media/ Saved Screen.

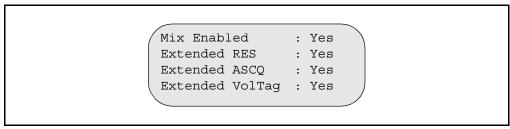


Figure 5-14 Mixed Media/Current Screen

Parameters	Values	
Mix Enabled	Yes indicates that the library is currently operating in mixed media mode. No indicates that the library is currently not operating in	

O1 Aug 2000 Status Menu Selection 5-17

mixed media mode. While the library is not operating in mixed media mode, the Extended RES, Extended ASCQ, and Extended VolTag are not applicable (N/A).

Extended RES Yes indicates that Extended

Read Element Status is

enabled

No indicates that Extended Read Element Status is

disabled

Extended ASCQ Yes indicates that Vendor

Unique Additional Sense Code Qualifiers are currently

enabled

No indicates that Vendor Unique Additional Sense Qualifiers are currently

disabled

Extended VolTag Yes indicates that the reported

bar code will include media

type identifier

No indicates that the reported bar code will not include the

media type identifier

Mix Enabled : Yes Extended RES : Yes Extended ASCQ : Yes Extended VolTag : Yes

Figure 5-15 Mixed Media/Default Screen

Parameters Values

Mix Enabled Yes indicates that mixed

media defaults to enabled **No** indicates that mixed media defaults to disabled. While Mix Enabled is disabled, the Extended RES, Extended ASCQ, and Extended VolTag are not applicable (N/A).

Extended RES Yes indicates that Extended

Read Element Status defaults

to enabled

No indicates that Extended Read Element Status defaults

to disabled

Extended ASCQ Yes indicates that Vendor

Unique Additional Sense Code Qualifiers default to enabled **No** indicates that Vendor Unique Additional Sense Qualifiers default to disabled

Extended VolTag Yes indicates that the reported

bar code will include media

type identifier

No indicates that the reported bar code will not include the media type identifier

Mix Enabled : Yes
Extended RES : Yes
Extended ASCQ : Yes
Extended VolTag : Yes

Figure 5-16 Mixed Media/Saved Screen

Parameters	Values
Mix Enabled	Yes indicates that mixed media is saved as enabled No indicates that mixed media is saved as disabled. While Mix Enabled is disabled, the Extended RES, Extended ASCQ, and Extended VolTag are not applicable (N/A).
Extended RES	Yes indicates that Extended Read Element Status is saved as enabled No indicates that Extended Read Element Status is saved as disabled

O1 Aug 2000 Status Menu Selection 5-15

Extended ASCQ Yes indicates that Vendor

Unique Additional Sense Code Qualifiers are saved as

enabled

No indicates that Additional Sense Qualifiers are saved as

disabled

Extended VolTag Yes indicates that the reported

bar code will include media

type identifier

No indicates that the reported bar code will not include the media type identifier

111001101

Parity

When Parity is selected, the Parity screen appears. Figure 5-17 shows the Parity/Current Screen. Figure 5-18 on page 5-21 shows the Parity/Default Screen. Figure 5-19 on page 5-21 shows the Parity/Saved Screen.

Parity : Yes Retries: 001

Figure 5-17 Parity/Current Screen

Parameters	Values
Parity	Yes indicates that SCSI parity is currently enabled No indicates that SCSI parity is currently disabled
Retries	Indicates the current number of transmission retries (000 999) due to a SCSI parity error

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Parity: Yes
Retries: 001

Figure 5-18 Parity/Default Screen

Parameters	Values
Parity	Yes indicates that SCSI parity defaults to enabled No indicates that SCSI parity defaults to disabled
Retries	Indicates the default number of transmission retries (000 999) due to a SCSI parity error

Parity : Yes Retries: 001

Figure 5-19 Parity/Saved Screen

Parameters	Values
Parity	Yes indicates that SCSI parity is saved as enabled No indicates that SCSI parity is saved as disabled
Retries	Indicates the saved number of transmission retries (000 999) due to a SCSI parity error

OI Aug 2000 Status Menu Selection 5-22

LCD

When LCD is selected, the LCD screen appears. Figure 5-20 shows the LCD/Current Screen. Figure 5-21 shows the LCD/Default Screen. Figure 5-22 on page 5-23 shows the LCD/Saved Screen.



Figure 5-20 LCD/Current Dialog

☐ Note	Parameters	Values
Press the button or the button to toggle between	Security	Disabled indicates that LCD security is currently disabled Enabled indicates that LCD security is currently enabled
the line number parameter values.	Line	Indicates the currently displayed text line (1 4)
	Text	Corresponding line of main screen text with up to 20 characters

Security: Disabled
Line : 1<
MAIN SCREEN
(default)

Figure 5-21 LCD/Default Dialog

	Parameters	Values
Press the button or the	Security	Disabled indicates that LCD security defaults to disabled
button to toggle between		Enabled indicates that LCD security defaults to enabled
the line number parameter values.	Line	Indicates the displayed default text line (1 4)

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Text

Corresponding line of main screen text with up to 20 characters

Security: Disabled

Line : 1<

(saved)

Figure 5-22 LCD/Saved Dialog

	Parameters	Values
Press the button or the button to toggle between	Security	Disabled indicates that LCD security is saved as disabled Enabled indicates that LCD security is saved as enabled
the line number parameter values.	Line	Indicates the saved displayed text line (1 4)
	Text	Corresponding line of main screen text with up to 20 characters

Status Menu Selection 5-2.

Reservations Dialog

When Reservations is selected, the Reservations Dialog is displayed. See Figure 5-23. This option is used to determine the state of the element reservations made by a SCSI host, to reserve elements for exclusive use within a multi initiator environment.

Bus: 0 < Host ID:0
Reservation ID: Any
Found: 0000
Accept: N

Figure 5-23 Reservation Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values in the following list.

Parameters	Values
Bus	Indicates the SCSI Bus ID number (0 1)
Host ID	Indicates the Host ID number (0 7)
Reservation ID	Indicates the host's reservation identifier (0x00 0xFF, Any)
Accept	Y to accept changes N to reject changes

Press the **u** button to confirm the changes.

The value of the Found parameter in the Reservation Dialog is supplied by the library firmware and can not be changed.

Step 2 Repeat Step 1 for all of the parameters in the list.

If **Y** *is selected for the Accept parameter value*, *the Response Dialog appears*.



See Figure 5-24. Otherwise, the changed parameters continue to display but no action is taken.

Bus: 0 < Host ID:0 ReservationID: Any

Found : 0109

Accept : N

Figure 5-24 Response Dialog

Parameters	Values
Found	Indicates the number of reserved elements which match the Bus, Host ID, and Reservation ID parameters.
Accept	Y to accept N to reject

O1 Aug 2000 Status Menu Selection 5-25

System Dialog

When System is selected, the System Dialog is displayed. See Figure 5-25. This option is used to view the current library operating statistics.

Cartridges :0122
Free cells :0036
Total gets :00000137
[more]

Figure 5-25 System Dialog

Parameters	Values
Cartridges	Indicates the number of cartridges in the storage cells (000 0787 for half inch and DLT cartridges) (0000 1181 for 8mm cartridges)
Free cells	Displays the number of free cells (788 - for all cells except 8mm) (1182 for 8mm cells)
Total gets	The total number of gets from elements (00000000 - 99999999)
[more]	More information on the Continuation Screen.
Press the butte Screen.	on to select the Continuation

The Continuation Screen appears. See Figure 5-26.

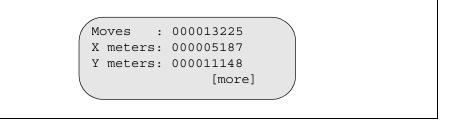


Figure 5-26 Continuation Screen

Step 1

Parameters	Values
Moves	Total move media commands that have been executed
X meters	Total meters traveled by the accessor in the horizontal direction
Y meters	Total meters traveled by the accessor in the vertical direction
[more]	More information on the Continuation Screen

Step 2 Press the button to select the Continuation Screen.

The Continuation Screen appears. See Figure 5-27.

Get retries : 000008
Put retries : 000010
Scan Retries: 000009
I/E Closes : 000050

Figure 5-27 Continuation Screen

Parameters	Values
Get retries	Total recovered get operations
Put retries	Total recovered put operations
Scan retries	Total recovered barcode scan operations
I/E closes	Total times the I/E station has been closed

O1 Aug 2000 Status Menu Selection 5-27

Elements Dialog

When Elements is selected, the Elements Dialog is displayed. See Figure 5-28. This option queries the individual element statistics. Individual element information is tracked since the last Teach New operation.

Enter Desired
Coord: S< 01 2 A 01
OR Element: 00000
Accept: N

Figure 5-28 Element Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

coordinates)

Parameters Values

Coord

The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell) The second field indicates the module number which can be modified if expansion modules are present (1..4) The third field indicates the storage cell section (1 .. 4), drive bay (1 .. 2), or IE station number The fourth field indicates the column of the section (A .. E), drive port (A .. B) or IE station column The fifth field indicates the row of the column. (01 .. 12 for half inch and DLT

(01 .. 18 for 8mm coordinates)

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Element Indicates the element number

which corresponds with the

coordinate parameter

Accept Y to accept changes

N to reject changes

Press the **\(\rightarrow**\) button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If Y is selected for the Accept parameter value, the Response Dialog appears. See Figure 5-29. Otherwise, the changed parameters continue to display but no action is taken.

Status: Full

BC: 000000000000345

Source: 0100 Valid : Yes

[more]

Figure 5-29 Response Dialog

Parameters	Values
Status	Full indicates that a cartridge is present in the element Empty indicates that a cartridge is not present in the element
ВС	Indicates the barcode label as found on the cartridge when the Status indicates Full
Source	Indicates the original location from which this element came
Valid	Yes indicates that the results shown are based on an inventory of the elements No indicates that the results shown are not based on an inventory of the elements
[more]	More information on the Continuation Screen

O1 Aug 2000 Status Menu Selection 5-29

Step 3 Press the button to select the Continuation Screen.

The Continuation Screen appears. Refer to Figure 5-30 on page 5-30.

Total Puts: 0000011
Put Retries: 0000000
Get Retries: 0000000
[more]

Figure 5-30 Continuation Screen

Parameters	Values
Total Puts	Indicates the total number of puts (0000000 99999999) that occurred at this element
Put Retries	Indicates the total number of put retries (0000000 99999999) that occurred at this element
Get Retries	Indicates the total number of get retries (0000000 99999999) that occurred at this element
[more]	More information on the Continuation Screen
Press the Screen.	ton to select the Continuation

The Continuation Screen appears. See Figure 5-31.

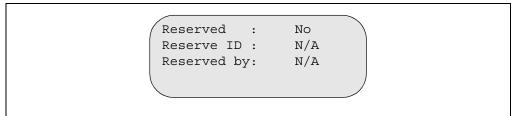


Figure 5-31 Continuation Screen

Step 4

Parameters Values

Reserved Yes indicates the element is

reserved by a SCSI host

No indicates the element is not reserved. When not reserved, Reserve ID and Reserved by parameters are not applicable

(N/A).

Reserve ID Indicates the reserve ID

Reserved by Indicates the ID of the

reserving host

Status Menu Selection 5-31

Logs Submenu

When Logs is selected, the Logs Submenu is displayed. This submenu offers two selections. See Figure 5-32. The Logs Submenu defaults to the Command Log selection.

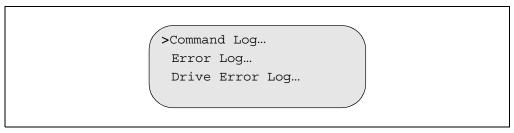


Figure 5-32 Logs Submenu

To choose one of the three selections, follow the steps.

Step 1 Press the button to select the Command Log Dialog.

— or —

Press the button or the button to select the Error Log Dialog or Drive Error Log Dialog.

Press the button.

The selected menu appears. Refer to Command Log Dialog on page 5-33, Error Log Dialog on page 5-35, or Drive Error Log Dialog on page 5-37.

5-32 Menus and Commands 600561-A

Command Log Dialog

When Command Log is selected, the Command Log Dialog is displayed. See Figure 5-33. This option is used to view a running history log of library operations. A service representative can retrieve this data for problem analysis.

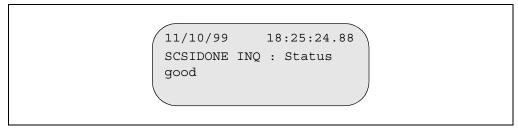


Figure 5-33 Command Log Dialog

To choose one of the selections, follow the steps.

Step 1 Press the button or the button to scroll through the entire log.

— or —

Press the 🖊 button to print the command log

If the button is pressed the response dialog is displayed. See Figure 5-34.

The system is about to print the log to the serial port!

Continue: N<

Figure 5-34 Response Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values in the following list.

O1 Aug 2000 Status Menu Selection 5-33

Parameters Values

Continue Y to print the log to the serial

port

N to not print the log to a serial

port

Press the **\(\rightarrow**\) button to confirm the changes.

These screens
These screens
Response Screens appears. See Figure 5-35 and
may flash by
quickly.

If Y is selected for the Continue parameter value, the two
Response Screens appears. See Figure 5-35 and
Figure 5-36. Otherwise, the changed parameter continue
to display but no action is taken.

Requested command is now in progress...

Figure 5-35 Response Screen

Requested command is now complete...

Figure 5-36 Response Screen

5-34 Menus and Commands 600561-A

Error Log Dialog

When Error Log is selected, the Error Log Dialog is displayed. See Figure 5-37. This option is used to view a running history log of error conditions that have occurred.

02/19/97 18:25:24.88

Type : SW Temp

Error : 0X02040000

Modifier: 0X00000000

Figure 5-37 Error Log Dialog

Step 1 Press the button or the button to scroll through the Error Log parameters.

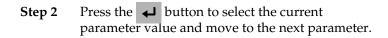
Parameters	Values
Туре	Indicates the type of error. Record the error type in <i>Error</i> <i>Log Codes</i> on page 7-15.
Error	Indicates the error identifier. Record the error identifier in <i>Error Log Codes</i> on page 7-15.
Modifier	Indicates the error modifier. Record the error modifier in <i>Error Log Codes</i> on page 7-15.
Press the button to print the error log	
If the button is pressed the response dialog is displayed. See Figure 5-34.	

The system is about to print the log to the serial port!

Continue: N<

Figure 5-38 Response Dialog

Status Menu Selection 5-3.



— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters Values

Continue Y to print the log to the serial

port

N to not print the log to a serial

port

Press the button to confirm the changes.

If **Y** is selected for the Continue parameter value, the two Response Screens appears. See Figure 5-35 and Figure 5-36. Otherwise, the changed parameter continue to display but no action is taken.

These screens may flash by quickly.

Requested command is now in progress...

Figure 5-39 Response Screen

Requested command is now complete...

Figure 5-40 Response Screen

Drive Error Log Dialog



When Drive Error Log is selected, the Drive Error Log Dialog is displayed. See Figure 5-41. This option is used to view a history log of drive error conditions.

THIS FUNCTION IS NOT
YET AVAILABLE
Press Escape.

Figure 5-41 Drive Error Log Dialog

Drives Submenu

When Drives is selected, the Drives Submenu is displayed. This submenu offers two selections. See Figure 5-42. The Drives Submenu defaults to the Drive State selection.

>Drive State...
Media Info...

Figure 5-42 Drives Submenu

To choose one of the two selections, follow the steps.

Step 1 Press the Dialog.

— or —

Press the Dialog. button or the A button to select the Drive State Dialog.

Press the **V** button or the **A** button to select the Media Info Dialog.

Press the 귙 button.

The selected screen appears. Refer to Drive State Dialog on page 5-38 or Media Info Dialog on page 5-40.

Status Menu Selection 5-37

Drive State Dialog



When Drive State is selected, the Drive State Dialog is displayed. See Figure 5-43. This option indicates the current state of the selected drive.

Drive: 1200<
State: Loaded
Clean Required: No
[more]

Figure 5-43 Drive State Dialog

Step 1 Press the button to select the current parameter value and move to the Continuation Screen.

— or —

Press the **V** button or the **b** button to toggle between the **Drive** parameter value in the following list.

Parameters	Values
Drive	Indicates the element address of the desired drive (01200 01247 for all 8mm and DLT drives) (01200-01215 for all half-inch drives)
[more]	More information on the Continuation Screen
Press the butte Screen.	on to select the Continuation

The Continuation Screen could take several seconds to return with the information.



The value of the State parameter in the Drive State Dialog is supplied by the library firmware and can not be changed. The State parameter indicates the state of the drive (LOADED, UNLOADED, LOADING, UNLOADING, DRIVE ERROR, UNKNOWN).



The value of the Cleaning Required parameter is the Drive State Dialog is supplied by the library firmware and can not be changed. The Cleaning Required parameter indicated if the drive requires cleaning (Yes, No).

The Continuation Screen appears. See Figure 5-44.

Ser Num : CX732M1820

Code : 213 120

SCSI ID : 03

Figure 5-44 Continuation Screen

Parameters	Values
Ser Num	Indicates the drive serial number
Code	Indicates the current controller and drive firmware level of the drive
SCSI ID	Indicates the current SCSI ID of the drive (00 15)

Status Menu Selection 5-39

Media Info Dialog

When Media Info is selected, the Media Info Dialog is displayed. See Figure 5-45. This option shows media information in loaded drive elements.

Enter SOURCE
Coord: D 01< 1 A 01
OR Element: 01200
Accept: N

Figure 5-45 Element Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Coord	The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell) The second field indicates the module number which can be modified if expansion modules are present (1 4) The third field indicates the storage cell section (1 4), drive bay (1 2), or IE station number The fourth field indicates the column of the section (A E), drive port (A B) or IE station column The fifth field indicates the row of the column. (01 12 for half inch and DLT coordinates) (01 18 for 8mm coordinates)
Element	Indicates the element number which corresponds with the coordinate parameter

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Press the button to confirm the changes.

If \mathbf{Y} is selected for the Accept parameter value, the Response Screen appears. See Figure 5-46. Otherwise, the changed parameters continue to display but no action is taken.

Type: 6GB DLTIII
Free: 00000000 KB
Write Protected: No

Mounts: 000016

Figure 5-46 Response Screen

Parameters	Values
Type	Indicates the type of drive media (for DLT: NO TAPE, UNKNOWN, CLEAN TAPE, TK50 R0, TK70 R0, 2.6Gb DLT III, 6Gb DLT IV, 10Gb DLT III, 15Gb DLT IIIXT, 20Gb DLT IV, 35Gb DLTIV, 40Gb DLT IV) (for 8mm: UNKNOWN, AIT WRITEABLE, AIT PARTITIONED, CLEAN TAPE, AIT MIC)
Free	Indicates the amount of free space in Kb remaining on the drive media
Write Protected	Yes indicates that the cartridge is write protected No indicates that the cartridge is not write protected
Mounts	Indicates the number of times the media has been mounted into a drive.

Status Menu Selection 5-41

Commands Menu Selection

The Commands Menu is primarily used to access various Scalar 1000 commands. Commands is selected from the Main Menu by following this procedure.

Step 1 If necessary, press the button until the Main Menu appears.

The Main Menu appears with the indicator positioned at Mode.

- Step 2 Press the very button or the button to position the selection indicator at Commands.

The Commands Menu appears. This menu offers four selections. See Figure 5-47. The Commands Menu defaults to the Park selection.

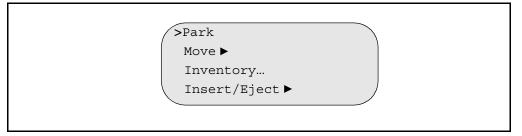


Figure 5-47 Commands Menu

To choose one of the four selections, follow the steps.

— or —

Press the **V** button or the **b** button to select the Move Submenu, Inventory Dialog, or Insert/Eject Submenu.

Press the 🖊 button.

The selected screen appears. Refer to Park on page 5-43, Move Submenu on page 5-43, Inventory Dialog on page 5-51 and Insert/Eject Submenu on page 5-54.

___ Park

When Park is selected, the gripper retracts and the accessor is immediately returned to the home position. The two Response Screens, see Figure 5-48 and Figure 5-49, appear.

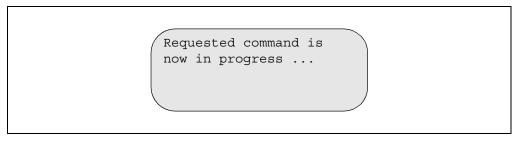


Figure 5-48 Response Screen

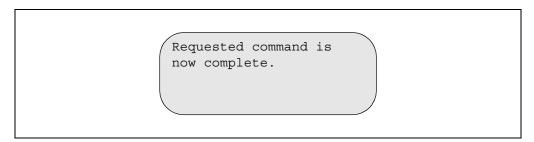


Figure 5-49 Response Screen

Move Submenu

Note

The Scalar 1000 must be Offline and Ready to use the commands under the Move Menu.

When Move is selected, the Move Menu is displayed. This menu offers two selections. See Figure 5-50. The Move Menu defaults to the Position to Elem selection.

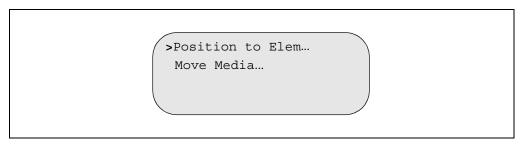


Figure 5-50 Move Submenu

To choose one of the two selections, follow the steps.

O1 Aug 2000 Commands Menu Selection 5-43

Step 1 Press the button to select the Position to Elem Dialog.

— or —

Press the **V** button or the **A** button to select the Move Media Dialog.

Press the 🖊 button.

The selected menu appears. Refer to Position to Elem Dialog on page 5-45 or Move Media Dialog on page 5-47.

Position to Elem Dialog

When Position to Elem is selected, the Position to Elem Dialog is displayed. See Figure 5-51. This option moves the accessor in front of a specific element.

Enter TARGET
Coord: S< 01 2 A 01
OR Element: 00000
Accept: N

Figure 5-51 Position to Elem Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Coord	The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell) The second field indicates the module number which can be modified if expansion modules are present (1 4) The third field indicates the storage cell section (1 4), drive bay (1 2), or IE station number The fourth field indicates the column of the section (A E), drive port (A B) or IE station column The fifth field indicates the row of the column. (01 12 for half inch and DLT coordinates) (01 18 for 8mm coordinates)
Element	Indicates the element number which corresponds with the coordinate parameter

O1 Aug 2000 Commands Menu Selection 5-4.

Accept Y to accept changes N to reject changes

Press the **J** button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If **Y** is selected for the Accept parameter value, two Response Screens appear. See Figure 5-52 and Figure 5-53. Otherwise, the changed parameters continue to display but no action is taken.

Requested command is now in progress ...

Figure 5-52 Response Screen

The accessor positions itself in front of the specific element.

Requested command is now complete.

Figure 5-53 Response Screen

Move Media Dialog

When Move Media is selected, the Move Media Dialog is displayed. See Figure 5-54. This option moves cartridges between elements without host intervention.

Enter SOURCE
Coord: S< 02 1 A 01
OR Element: 00000
Accept: N

Figure 5-54 Move Media Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **V** button or the **b** button to toggle between the parameter values in the following list.

Parameters	Values
Coord	The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell) The second field indicates the module number which can be modified if expansion modules are present (1 4) The third field indicates the storage cell section (1 4), drive bay (1 2), or IE station number The fourth field indicates the column of the section (A E), drive port (A B) or IE station column The fifth field indicates the row of the column. (01 12 for half inch and DLT coordinates) (01 18 for 8mm coordinates)
Element	Indicates the element number which corresponds with the coordinate parameter

OT Aug 2000 Commands Menu Selection 5-42

Accept Y to accept changes N to reject changes

Press the **J** button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If \mathbf{Y} is selected for the Accept parameter value, the Target Menu appears. See Figure 5-55. Otherwise, the changed parameters continue to display but no action is taken.

Enter TARGET
Coord: I< 01 1 A 01
OR Element: 01182
Accept : N

Figure 5-55 Target Dialog

Step 3 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **V** button or the **b** button to toggle between the parameter values in the following list.

Parameters Values

Coord

The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell)
The second field indicates the module number which can be modified if expansion modules are present (1 .. 4)
The third field indicates the storage cell section (1 .. 4), drive bay (1 .. 2), or IE station number The fourth field indicates the column of the section (A .. E), drive port (A .. B) or IE station column

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The fifth field indicates the row of the column. (01 .. 12 for half inch and DLT coordinates) (01 .. 18 for 8mm coordinates)

Element Indicates the element number

which corresponds with the

coordinate parameter

Accept Y to accept changes

N to reject changes

Press the **J** button to confirm the changes.

Step 4 Repeat Step 3 for all of the parameters in the list.

If **Y** is selected for the Accept parameter value, the Response Screens appear. See Figure 5-56 and Figure 5-57. Otherwise, the changed parameters continue to display but no action is taken.

Requested command is now in progress ...

Figure 5-56 Response Screen

The accessor moves the cartridge between the selected Source and Target elements.

Requested command is now complete.

Figure 5-57 Response Screen

If a Move Media is attempted without an inventory, the following screen, refer to Figure 5-58 on page 5-50, is displayed.

O1 Aug 2000 Commands Menu Selection 5-49

-=> WARNING <=The library may not
be inventoried.

Continue: N

Figure 5-58 Warning Dialog

Step 5 Press the button to select the current parameter value.

— or —

Press the button or the button to toggle between the parameter values.

Parameters Values

Continue Y to continue
N to return to the previous
menu

If \mathbf{Y} is selected for the Continue parameter, the Warning message is removed.

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Inventory Dialog

When *Inventory* is selected, the Inventory Dialog is displayed. See Figure 5-59. This option allows inventory of specified elements.

Starting Inventory
Coord: S 02 1< A 01
OR Element: 00000
Accept: N

Figure 5-59 Inventory Dialog

Step 1 Press the utton to select the current parameter value and move to the next parameter.

— or —

Press the **V** button or the **b** button to toggle between the parameter values in the following list.

Parameters	Values
Coord	The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell) The second field indicates the module number which can be modified if expansion modules are present (1 4) The third field indicates the storage cell section (1 4), drive bay (1 2), or IE station number The fourth field indicates the column of the section (A E), drive port (A B) or IE station column The fifth field indicates the row of the column. (01 12 for half inch and DLT coordinates) (01 18 for 8mm coordinates)
Element	Indicates the element number which corresponds with the coordinate parameter

Commands Menu Selection 5-5

Accept Y to accept changes N to reject changes

Press the $\begin{picture}(100,0) \put(0,0){\line(0,0){100}} \put(0,0){\lin$

Step 2 Repeat Step 1 for all of the parameters in the list.

If Y is selected for the Accept parameter value, the Number of Elements Dialog, see Figure 5-60 appears. Otherwise, the changed parameters continue to display but no action is taken.

Number of Elements
to Inventory: 0100<</pre>

Accept: N

Figure 5-60 Number of Elements Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **V** button or the **b** button to toggle between the parameter values in the following list.

Parameters Values

Elements Indicates the number of

elements to inventory

Accept Y to accept changes

N to reject changes

Press the $\begin{picture}(100,0) \put(0,0){\line(0,0){100}} \put(0,0){\lin$

If **Y** is selected for the Accept parameter value, the Response Screens, Refer to Figure 5-61 on page 5-53 and Figure 5-62 on page 5-53, appear. Otherwise, the changed parameters continue to display but no action is taken.

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Requested command is now in progress ...

Figure 5-61 Response Screen

The barcode scanner inventories the specified storage cells.

Requested command is now complete.

Found: 100

Figure 5-62 Response Screen

Parameters Values

Found Indicates the total number of cartridges detected.

Commands Menu Selection 5-52

Insert/Eject Submenu

Note

Use this option to insert or eject cartridge(s) without host intervention.

When Insert/Eject is selected, the Insert/Eject Submenu is displayed. This submenu offers four selections. See Figure 5-63. The Insert/Eject Submenu defaults to the Insert selection.

>Insert
Insert Clean Tape...
Eject...
Eject Clean Tape...

Figure 5-63 Insert/Eject Submenu

To choose one of the four selections, follow the steps.

Step 1 Press the button to select the Insert Screen.

— or —

Press the **V** button or the **A** button to select the Insert Dialog, Insert Clean Tape Dialog, Eject Dialog or Eject Clean Tape Dialog.

Press the 🖊 button.

The selected menu appears. Refer to Insert Screen on page 5-55, Insert Clean Tape Dialog on page 5-56, Eject Dialog on page 5-61, or Eject Clean Tape Dialog on page 5-63.

Insert Screen

When Insert is selected, the Insert Screen is displayed. See Figure 5-64. This option moves all cartridges found in the Insert/Eject station to the first available empty storage cells. If there are no cartridges in the Insert/Eject station, the response screen appears. See Figure 5-65.

Insert in progress

Source: 1182 Target: 0000

Figure 5-64 Insert Screen

The accessor moves the cartridge(s) from the Insert/Eject station to the first available empty storage cell(s). Current Source and Target elements are updated. After completion, the Response Screen appears. See Figure 5-65.

Requested command is now complete.

Figure 5-65 Response Screen

Commands Menu Selection 5-55

Insert Clean Tape Dialog

When Insert Clean Tape is selected, the Insert Clean Tape Dialog is displayed. See Figure 5-66. This option moves selected cleaning cartridges from the Insert/Eject station to the designated empty storage cells.

Enter SOURCE
Coord: I 01< 1 A 01
OR Element: 01182
Accept: N

Figure 5-66 Insert Clean Tape Dialog

Step 1 Press the button to select the current parameter default value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle the Element parameter values.

Parameters Value Coord The firs

The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell) The second field indicates the module number which can be modified if expansion modules are present (1 .. 4) The third field indicates the storage cell section (1..4), drive bay (1 .. 2), or IE station number The fourth field indicates the column of the section (A .. E), drive port (A .. B) or IE station The fifth field indicates the row of the column. (01 .. 12 for half inch and DLT coordinates) (01 .. 18 for 8mm coordinates)

Element Indicates the Insert/Eject

station element number where

the insert operation starts

Accept Y to accept changes

N to reject changes

Press the button to confirm the changes.

If **Y** *is selected for the Accept parameter value, the Insert* Range Dialog appears. See Figure 5-67. Otherwise, the changed actions continue to display but no action is taken.

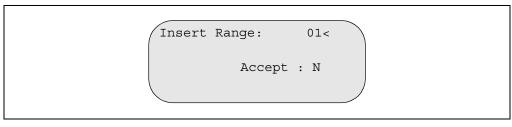


Figure 5-67 **Insert Range Dialog**

Press the **J** button to select the current parameter Step 2 default value and move to the next parameter.

— or —

Press the ▼ button or the ▲ button to toggle the Insert Range parameter values.

Parameters	Value
Insert Range	Indicates the number of elements for the insert operation (01 12 for half inch and DLT elements) (01 18 for 8mm elements)
Accept	Y to accept changes N to reject changes

Press the $\begin{picture}(100,0) \put(0,0){\line(0,0){100}} \put(0,0){\lin$

If **Y** *is selected for the Accept parameter value, the Target* Dialog appears. See Figure 5-68. Otherwise, the changed actions continue to display but no action is taken.

Commands Menu Selection 01 Aug 2000

Enter TARGET
Coord: S 01 2< A 01
OR Element: 00000
Accept: N

Figure 5-68 Target Dialog

Step 3 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

N to reject changes

Press the button to confirm the changes.

Parameters Values Coord Note The first field indicates the type of cell (I for I/E Station, D The starting address is for Drive, S for Storage cell) indicated by the The second field indicates the Coordinate or module number which can be Element modified if expansion parameter. If modules are present (1 .. 4) several cleaning tapes are The third field indicates the inserted, the storage cell section (1 .. 4), Coordinate or drive bay (1 .. 2), or IE station Element is specified for the The fourth field indicates the first empty cell in a group of column of the section (A .. E), consecutive drive port (A .. B) or IE station empty cells. column The fifth field indicates the row of the column. (01 .. 12 for half inch and DLT coordinates) (01 .. 18 for 8mm coordinates) Element Indicates the element number which corresponds with the coordinate parameter Accept **Y** to accept changes

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If Y is selected for the Accept parameter value, the Usage Dialog appears. See Figure 5-69. If N is selected, the changed parameters continue to display but no action is taken.

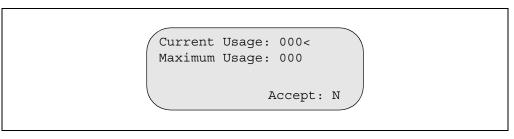


Figure 5-69 Usage Dialog

Step 4 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **V** button or the **b** button to toggle between the parameter values in the following list.

Parameters	Values
Current Usage	Indicates the number of times the cleaning cartridge has been used (000 511)
Maximum Usage	Indicates the maximum number of allowable uses for the cleaning cartridge (000 511)
Accept	Y to accept changes N to reject changes

Press the button to confirm the changes.

If **Y** is selected for the Accept parameter value, the accessor moves the number of cleaning cartridges to the designated range of storage cells. When the operation completes, the Response Screen appears. See Figure 5-70. If **N** is selected, the changed parameters continue to display but no action is taken.

Commands Menu Selection 5-58

Requested command is now complete.

Figure 5-70 Response Screen

Eject Dialog

When Eject is selected, the Eject Dialog is displayed. See Figure 5-71. This option allows removal of cartridges without opening the front door(s) or without host intervention. The final destination is a slot in the Insert/Eject station.

Enter SOURCE Coord: S< 02 1 A 01 OR Element : 01182 Accept: N

Figure 5-71 Eject Dialog

Step 1 Press the button to select the current parameter default value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle the Coordinate parameter values.

Parameters Values

Coord

The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell)
The second field indicates the module number which can be modified if expansion modules are present (1 .. 4)
The third field indicates the storage cell section (1 .. 4), drive bay (1 .. 2), or IE station number
The fourth field indicates the column of the section (A .. E), drive port (A .. B) or IE station column

The fifth field indicates the row of the column. (01 .. 12 for half inch and DLT coordinates) (01 .. 18 for 8mm coordinates)

O1 Aug 2000 Commands Menu Selection 5-6

Element Indicates the element number

which corresponds with the

coordinate parameter

Accept Y to accept changes

N to reject changes

Press the **J** button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameter in the list.

If Y is selected for the Accept parameter value, the Eject Screen appears. See Figure 5-72. Otherwise, the changed actions continue to display but no action is taken.

Eject in progress Source: 00000

Target: 1182

Figure 5-72 Eject Screen

The cartridge is ejected to the first available empty cell in the Insert/Eject station. The Response Screen appears. See Figure 5-73.

Requested command is now complete.

Figure 5-73 Response Screen

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Eject Clean Tape Dialog

When Eject Clean Tape is selected, the Eject Clean Tape Dialog is displayed. See Figure 5-74. This option allows removal of the cleaning cartridge(s) without opening the front door(s) or without host intervention

Enter SOURCE
Coord: S 01 1< A 13
OR Element: 00000
Accept: N

Figure 5-74 Eject Clean Tape Dialog

Step 1 Press the button to select the current parameter default value and move to the next parameter.

— or —

Press the button or the button to toggle the Coordinate parameter values.

Parameters Values

Coord

The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell) The second field indicates the module number which can be modified if expansion modules are present (1..4) The third field indicates the storage cell section (1 .. 4), drive bay (1 .. 2), or IE station number The fourth field indicates the column of the section (A .. E), drive port (A .. B) or IE station column The fifth field indicates the row of the column. (01 .. 12 for half

inch and DLT coordinates) (01 .. 18 for 8mm coordinates)

O1 Aug 2000 Commands Menu Selection 5-63

Element Indicates the element number

which corresponds with the

coordinate parameter

Accept Y to accept changes

N to reject changes

Press the
button to confirm the changes.

If **Y** is selected for the Accept parameter value, the Clean Media Eject Screen appears. Refer to Figure 5-75. Otherwise, the changed actions continue to display but no action is taken.

Eject in progress
Source: 00000
Target: 00788

Figure 5-75 Eject Clean Tape Screen

The cartridge is ejected to the first available empty cell in the Insert/Eject station. The Response Screen appears. See Figure 5-76.

Requested command is now complete.

Figure 5-76 Response Screen

5-64 Menus and Commands 600561-A

Database Menu Selection

The Database Menu is primarily used to gain element database information. Database is selected from the Main Menu by following this procedure.

Step 1 If necessary, press the button until the Main Menu appears.

The Main Menu appears with the indicator positioned at Mode.

- Step 2 Press the very button or the button to position the selection indicator at Database.

The Database Menu appears. This menu offers four selections. See Figure 5-77. The Database Menu defaults to the Media selection.

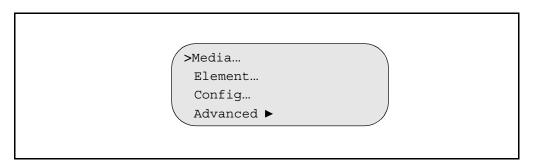


Figure 5-77 Database Menu

To choose one of the four selections, follow the steps.

Step 4 Press the button to select the Media Dialog.

— or —

Press the button or the button to select the Element Dialog, Config Dialog, or the Advanced Dialog.

Press the button.

The selected menu appears. Refer to Media Dialog on page 5-66, Element Dialog on page 5-67, Config Dialog on page 5-70, or Advanced Dialog on page 5-71.

01 Aug 2000 Database Menu Selection 5-65

Media Dialog

When Media is selected, the Media Dialog is displayed. This option obtains information about specific cartridges based on the barcode label.

In default or mixed media mode, 6 characters are required. In extended mode, five characters are required. However, up to sixteen characters may be entered. Figure 5-78 shows the Media Dialog.

```
Enter volume label:

AAAAAA

A
Accept : N
```

Figure 5-78 Media Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle the parameter values in the following list.

Parameters	Values
AAAAA	Indicates the volume label $(A Z, 0 9, ^, *)$
Accept	Y to accept changes N to reject changes

Press the $\begin{tabular}{l} \begin{tabular}{l} \b$

Step 2 Repeat Step 1 for all of the parameters in the list.

If \mathbf{Y} is selected for the Accept parameter value, the Response Screen, refer to Figure 5-79 on page 5-67, appears. Otherwise, the changed parameters continue to display but no action is taken.

If in extended mode, the space value (^) erases the remaining values and the wildcard value (*) is used to indicate that any volume label that includes the preceding values will be selected.

BC: 000389

Type: 3590

Home: 0060

Current: 0060

Figure 5-79 Response Screen

Parameters	Values
BC	Indicates the value specified in the Media Dialog
Туре	Indicates the cartridge media type (8590, DLT, 3480, 3490, 3590, 3590 DL, NCTP, 8mm)
Home	Indicates the home location of the cartridge
Current	Indicates the current location of the cartridge

Element Dialog

When Element is selected, the Element Dialog is displayed. See Figure 5-80. This option obtains information about a specific element from the database.

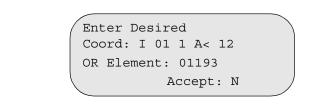


Figure 5-80 Element Dialog

Step 1 Press the button to select the parameter values and move to the next parameter.

— or —

Database Menu Selection 5-67

Press the **v** button or the **b** button to toggle between the parameter values in the list.

Parameters	Values
Coord	The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell) The second field indicates the module number which can be modified if expansion modules are present (1 4) The third field indicates the storage cell section (1 4), drive bay (1 2), or IE station number The fourth field indicates the column of the section (A E), drive port (A B) or IE station column The fifth field indicates the row of the column. (01 12 for half inch and DLT coordinates) (01 18 for 8mm coordinates)
Element	Indicates the element number which corresponds with the coordinate parameter
Accept	Y to accept changes N to reject changes
Press the butto	on to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If \mathbf{Y} is selected for the Accept parameter value, the Response Dialog appears. Refer to Figure 5-81 on page 5-69. Otherwise, the changed actions continue to display but no action is taken.

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Type : DLT IE

Coord : I 01 1 A 12

Address : 0027

Index : 1193 [more]

Figure 5-81 Response Dialog

Parameters	Values
Туре	Indicates the element type (3480 IE, DLT IE, MIXED IE, 8mm IE, 3480 STOR, DLT STOR, 8mm STOR, 3480 DRIVE, 3590 DRIVE, NCTP DRIVE, DLT4 DRIVE, DLT7 DRIVE, 8mm DRIVE)
Coord	Indicates the element coordinate location
Address	Indicates the current SCSI element address
Index	Indicates the database element index
Press the Screen.	ton to select the Configuration

The Configuration Screen appears. See Figure 5-82.

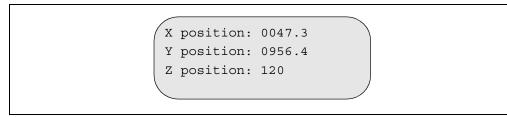


Figure 5-82 Configuration Screen

Step 3

Parameters	Values
X position	Indicates the horizontal coordinate in millimeters
Y position	Indicates the vertical coordinate in millimeters
Z position	Indicates the depth coordinate

Database Menu Selection 5-65

Config Dialog

When Config is selected, the Config Dialog is displayed. See Figure 5-83. This option allows viewing of the current library configuration.

The Continuation Screen appears. Refer to Figure 5-84

600561-A

Serial#: 201100001

Frames : 1 Cells : 158

Drives : 2 [more]

Figure 5-83 Config Dialog

		Parameters	Values
If the Operator suspects a library configuration problem, use the Teach New option. Refer to <i>Teach New Dialog</i> on page 5-167.		Serial	The serial number of the library
		Frames	The number of frames (1 4)
		Cells	The number of storage cells (1 788 for half inch and DLT cells) (1 1181 for 8mm cells)
		Drives	The number of drives (1 48 for half inch and DLT drives) (248 for 8mm drives)
	[more]	More information on the Continuation Screen.	
	Step 1	Press the butto Screen.	on to select the Continuation

on page 5-71.

5-70 Menus and Commands

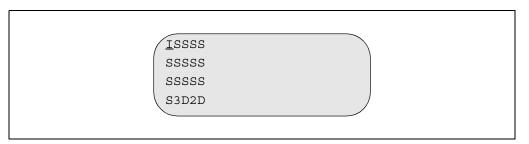


Figure 5-84 Continuation Screen

The screen is a graphics representation of the configuration of the library.

☑ Note	Parameters	Values
Use the button to scroll	ISSSS	Insert/Eject station (I) and 4 columns of Storage Cells (S)
the cursor to the right. Press the	SSSSS	5 columns of Storage Cells (S)
the button to scroll the	SSSSS	5 columns of Storage Cells (S)
cursor up or down. Press the	S3D2D	1 column of Storage Cells (S) and the number (1, 2, 3, 4, 6) of drives (D) in each port of
display specific information about the		the bottom drive bay.
character above the cursor.		

Advanced Dialog

When Advanced is selected, the Advanced Dialog appears. See Figure 5-85.

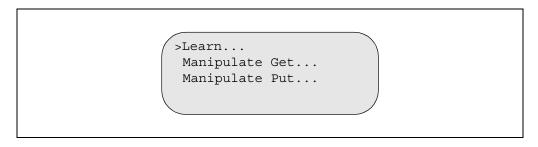


Figure 5-85 Advanced Dialog

To choose one of the three selections, follow the steps.

Database Menu Selection 5-72

Step 1 Press the $\begin{cases} \begin{cases} \begin{cas$

— or —

Press the **V** button or the **A** button to select the Manipulate Get Dialog, or Manipulate Put Dialog.

Press the 🖊 button.

The selected menu appears. See Learn Dialog or refer to Manipulate Get on page 5-73 or Manipulate Put on page 5-74.

Learn Dialog

When Learn is selected, the Learn Dialog appears. See Figure 5-86. This option is reserved for Customer and Product Engineering Services and is password protected.

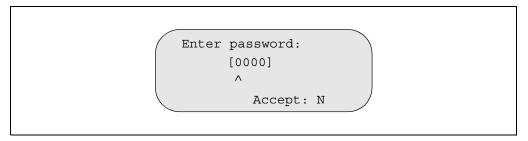


Figure 5-86 Learn Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values.

Parameters	Values
Password	Selects the password (0000 9999)
Accept	Y to accept the changes N to reject the changes
Press the butt	on to confirm the changes.

Step 2 Repeat Step 1 for all password parameters.

5-72 Menus and Commands 600561-A

Manipulate Get

When Manipulate Get is selected, the Manipulate Get Dialog appears. See Figure 5-87. This option is reserved for Customer and Product Engineering Services and is password protected.

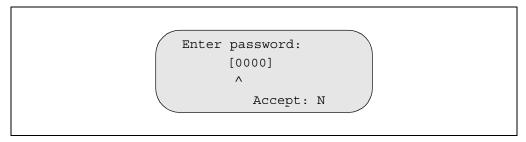


Figure 5-87 Manipulate Get Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

- or -

Press the button or the button to toggle between the parameter values.

Parameters	Values
Password	Selects the password (0000 9999)
Accept	Y to accept the changes N to reject the changes
Press the 귈 butt	on to confirm the changes.

Step 2 Repeat Step 1 for all password parameters.

Database Menu Selection 5-73

Manipulate Put

When Manipulate Put is selected, the Manipulate Put Dialog appears. See Figure 5-88. This option is reserved for Customer and Product Engineering Services and is password protected.

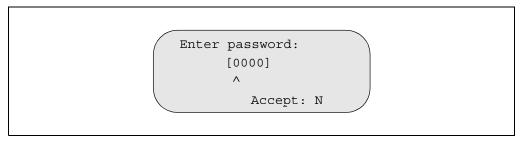


Figure 5-88 Manipulate Put Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values.

Parameters	Values
Password	Selects the password (0000 9999)
Accept	Y to accept the changes N to reject the changes
Press the 🖊 butto	on to confirm the changes.

Step 2 Repeat Step 1 for all password parameters.

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Setup Menu Selection

The Setup Menu is primarily used to change operational characteristics of the Scalar 1000. Setup is selected from the Main Menu by following this procedure.

- Step 1 If necessary, press the button until the Main Menu appears.
- Step 2 Press the ▼ button or the ▲ button to position the selection indicator at Setup.

The Setup Menu appears. This menu offers three selections. See Figure 5-89. The Setup Menu defaults to the Library selection.

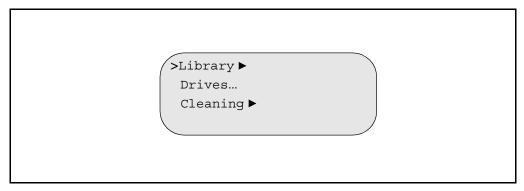


Figure 5-89 Setup Menu

To choose one of the three selections, follow the steps.

— or —

Press the value button or the button to select the Drives Dialog, or Cleaning Submenu.

Press the ullet button.

The selected menu appears. Refer to Library Submenu on page 5-76, Drives Dialog on page 5-98, or Cleaning Submenu on page 5-100.

O1 Aug 2000 Setup Menu Selection 5-75

Library Submenu

When Library is selected, the Library Submenu is displayed. This submenu offers seven selections. See Figure 5-90. The Library Submenu defaults to the SCSI selection.

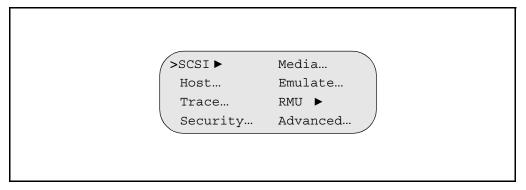


Figure 5-90 Library Submenu

To choose one of the seven selections, follow the steps.

Step 1 Press the $\begin{cases} \begin{cases} \begin{ca$

— or —

Press the v button or the button to select the Host Dialog, Trace Dialog, Security Dialog, Media Dialog, Emulate Dialog RMU Submenu, or Advanced Dialog.

Press the 🖊 button.

The selected menu appears. Refer to SCSI Submenu on page 5-77, Host Dialog on page 5-82, Trace Dialog on page 5-83, Security Dialog on page 5-84, Media Dialog on page 5-90, Emulate Dialog on page 5-92, RMU Submenu on page 5-93, or Advanced Dialog on page 5-96.

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SCSI Submenu

When SCSI is selected, the SCSI Submenu is displayed. This menu offers three selections. See Figure 5-91. The SCSI Submenu defaults to the Target ID selection.

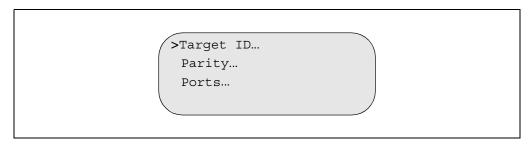


Figure 5-91 SCSI Submenu

To choose one of the three selections, follow the steps.

Step 1 Press the

button to select the Target ID Dialog.

or —

Press the

button or the

button to select the Parity Dialog or Ports Dialog.

Press the

button.

The selected menu appears. Refer to Target ID Dialog on page 5-78, Parity Dialog on page 5-79, or Ports Dialog on page 5-80.

Setup Menu Selection 5-77

Target ID Dialog



When Target ID is selected, the Target ID Dialog is displayed. See Figure 5-92. This option sets the SCSI ID of the library. Any change will not take effect until library power is cycled.

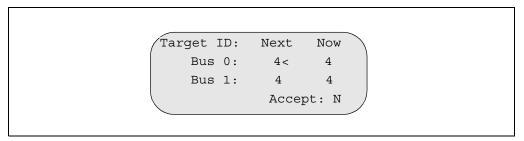


Figure 5-92 Target ID Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Bus 0: NEXT	Next indicates the SCSI ID address that takes effect for bus port 0 after power is cycled (0 7)
Bus 1: NEXT	Next indicates the SCSI ID address that takes effect for bus port 1 after power is cycled (0 7)
Accept	Y to accept changes N to reject changes

Step 2 Repeat Step 1 for all of the parameters in the list.

Press the $\begin{tabular}{ll} \begin{tabular}{ll} \begin{tabular}$



The value of the Bus 1: Now parameter in the Target ID Dialog is supplied by the library firmware and can not be changed. The Bus 1: Now parameter indicates the SCSI ID address that is currently in effect (0 .. 7) for bus port 0.



The value of the Bus 1: Now parameter in the Target ID Dialog is supplied by the library firmware and can not be changed. The Bus 1: Now parameter indicates the SCSI ID address that is currently in effect (0 .. 7) for bus port 1.

If Y is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

Parity Dialog

When Parity is selected, the Parity Dialog is displayed. See Figure 5-93. This option sets the SCSI bus parity behavior. Any change will not take effect until library power is cycled.

Parity Yes< Yes
Retries 001 001
Accept: N

Figure 5-93 Parity Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the v button or the button to toggle between the parameter values in the following list.

Parameters

Values

Parity: Next

YES to enable SCSI parity
NO to disable SCSI parity

Retries: Next

Set the number of retries
(000 .. 255) allowed when a
SCSI parity error is detected

Accept

Y to accept changes
N to reject changes

Press the $\begin{tabular}{ll} \begin{tabular}{ll} \begin{tabular}$

The value of the Parity: Now parameter in the Parity Dialog is supplied by the library firmware



O1 Aug 2000 Setup Menu Selection 5-79

0

and can not be changed. The Parity: Now parameter indicates if the SCSI parity is enabled (Yes, No). If parity is disabled, the retries parameter is ignored.

The value of the Retries: Now parameter in the Parity Dialog is supplied by the library firmware and can not be changed. The Retries: Now parameter indicates the current number of retries (000 .. 255) allowed when a SCSI parity error is detected.

Step 2 Repeat Step 1 for all of the parameters in the list.

If Y is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

Ports Dialog

When Ports is selected, the Ports Dialog is displayed. See Figure 5-94. This option indicates the current SCSI bus type and usage.

INSTALLED TYPE
Bus 0: YES HVD
Bus 1: NO -

Figure 5-94 Ports Screen

Parameters	Values
Bus 0 : Installed	YES indicates the port is active NO indicates the port is not active.
Bus 0 : Type	HVD indicates the bus is high voltage differential LVD indicates the bus is low voltage differential SE indicates the bus is single ended.
Bus 1 : Installed	YES indicates the port is active NO indicates the bus is not active.

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Bus 1 : Type

HVD indicates the bus is high voltage differential LVD indicates the bus is low voltage differential SE indicates the bus is single ended.

O1 Aug 2000 Setup Menu Selection 5-8

Host Dialog

When Host is selected, the Host Dialog is displayed. See Figure 5-95. This option sets the type of host control.

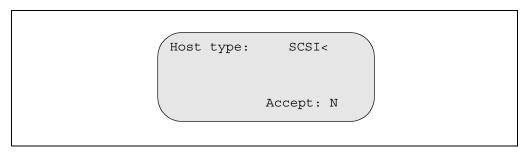


Figure 5-95 Host Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values in the following list.

Parameters Values

Host type SCSI indicates SCSI control

Accept Y to accept changes
N to reject changes

Press the button to confirm the changes.

Step 2 Repeat Step 1 of all of the parameters in the list.

If \mathbf{Y} is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

At present, only SCSI control is

supported.

Trace Dialog

When Trace is selected, the Trace Dialog is displayed. See Figure 5-96. This option defines and enables the serial service port.

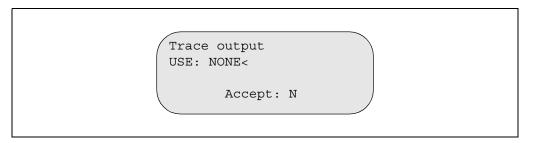


Figure 5-96 Trace Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter default values in the following list.

Parameters	Values
USE	SERIAL indicates information is returned via the serial port NONE is the default to allow the port to be used for RMU communication VCONSOL is used for development only
Accept	Y to accept changes N to reject changes

Press the button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If \mathbf{Y} is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

If the RMU is not installed, this option must be set to SERIAL in order to prevent a SAC from being

posted.

Setup Menu Selection 5-83

Security Dialog

When Security is selected, the Security Dialog is displayed. See Figure 5-97. This option changes the Operator Panel LCD Security mode and/or the password that protects it. The Operator Panel can also be secured by the host. Whichever method is used to secure the Operator Panel must be the method used to release the security. If a password has not been set, the password dialog screen is shown.

Security Enabled : N<
Change password : N
Accept : N

Figure 5-97 Security Dialog

Switching Security From Off to On

To switch the security from off to on, follow the steps below:

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Security	Y to enable LCD security N to disable LCD security
Password	If the password is to be changed, refer to <i>Changing the Password</i> on page 5-87. If the password is not to be changed, select N
Accept	Y to accept changes N to reject changes
Press the 귙	button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

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If **Y** is selected for the Accept parameter and the security parameter is enabled, the Password Dialog appears. See Figure 5-98.

If N is selected for the Accept parameter the changed parameters continue to display but no action is taken.



Figure 5-98 Password Dialog

Step 3 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values.

Parameters Values

Password Indicates the password

(0000 .. 9999)

Accept Y to accept changes

N to reject changes

Press the button to confirm the changes.

If **Y** *is selected for the Accept parameter value, the response screens appears. See Figure 5-99.*

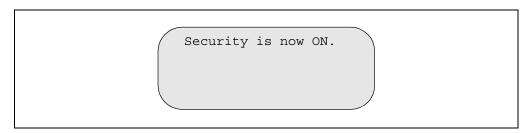


Figure 5-99 Security is ON Screen

Step 4 Press the Submenu. Submenu.

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Switching Security From On to Off

To switch the security from on to off, follow the steps below:

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Security	Y to enable LCD security N to disable LCD security
Password	If the password is to be changed, refer to <i>Changing the Password</i> on page 5-87. If the password is not to be changed, select N
Accept	Y to accept changes N to reject changes

Press the button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If Y is selected for the Accept parameter and the security parameter is disabled, the Password Dialog appears. See Figure 5-100.

If N is selected for the Accept parameter, the changed parameters continue to display but no action is taken.

```
Enter password :
[0000]

^
Accept : N
```

Figure 5-100 Password Dialog

Step 3 Press the button to select the current parameter value and move to the next parameter.

— or —

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Press the **v** button or the **b** button to toggle between the parameter values.

Parameters	Values
Password	Indicates the password (0000 9999)
Accept	Y to accept changes

N to reject changes

Press the
button to confirm the changes.

If Y is selected for the Accept parameter value and the password is verified, the response screens appear. See Figure 5-101.

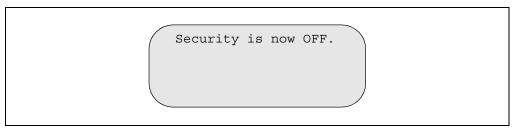


Figure 5-101 Security is OFF Screen

Step 4 Press the Submenu. button to return to the Setup

Changing the Password

To change the password follow the steps below:

Step 1 Press the utton to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Security	If the Security is to be changed refer to <i>Switching Security From Off to On</i> on page 5-84 or <i>Switching Security From On to Off</i> on page 5-86.

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Password Y to change LCD password

N to leave the LCD password

as it is

Accept Y to accept changes

N to reject changes

Press the **J** button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If **Y** is selected for the Accept parameter and the password parameter, the Change Password Dialog appears. Otherwise, the changed parameters continue to display but no action is taken.

Change Password
Old[0000] New[0000]
Accept: N

Figure 5-102 Change Password Dialog

Step 3 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values.

Parameters	Values
Old	Indicates the password to be changed (0000 9999)
New	Indicates what the password will be changed to (0000 9999)
Accept	Y to accept changes N to reject changes

If **Y** is selected for the Accept parameter value, the password is changed and the Changed Password Screen appears. Refer to Figure 5-102 on page 5-88. Otherwise, the changed parameters continue to display but no action is taken.

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The password has been changed.

Figure 5-103 Password Changed

Step 4 Press the Submenu. button to return to the Setup Submenu.

Setup Menu Selection 5-85

Media Dialog

When Media is selected, the Media Dialog is displayed. See Figure 5-104. This option controls the setting for media handling and reporting. The host software must support mixed media types if the library is operating in mixed media mode. For additional information, refer to document number 600840 Scalar 1000 SCSI Reference Manual.

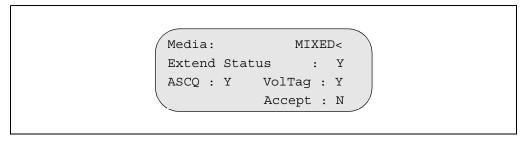


Figure 5-104 Media Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

If the value of the Media parameter is changed, an inventory is

required.

Media

Parameters

Values

DEFAULT indicates that the library supports 6 character bar code labels, or mixed media labels that have an additional 7th media ID character. The bar code is stored and reported as a 6 character bar code (ignoring any mixed media IDs). **EXTENDED** indicates that the library supports 5 to 16 character bar code labels, which may indicate any mixed media IDs and/or checksums. MIXED indicates that the library supports only 6 character bar code labels with an additional 7th media character media type identifier

Note

Extend status, ASCQ, and VolTag are valid only when mixed media types are enabled and the cartridges are properly labeled with barcode labels having a media identifier. Extend Status Y indicates that extended

element descriptor status is

enabled

N indicates that extended element descriptor status is

disabled

ASCQ Y indicates that extended

Additional Sense Code Qualifiers is enabled N indicates that extended Additional Sense Code Qualifiers are disabled

VolTag Y indicates that the reported

BC will include the media ID N indicates that the reported BC will not include the media

ID

Accept Y to accept changes

N to reject changes

Press the
button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If Y is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

O1 Aug 2000 Setup Menu Selection 5-92

Emulate Dialog

When Emulate is selected, the Emulate Dialog is displayed. See Figure 5-105. This option changes the operating mode of the library. Different emulation modes cause the library to respond to SCSI **INQUIRY** commands in a manner consistent with the listed library emulation type. Any change will not take effect until the library power is cycled.

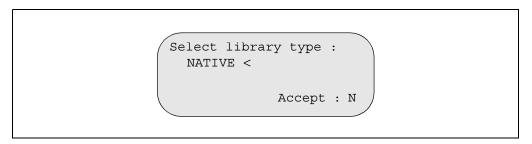


Figure 5-105 Emulate Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Library type	NATIVE STK 9710 EXB 480 EMASS
Accept	Y to accept changes N to reject changes

Press the
button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If **Y** is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

Refer to the document number 600974 Scalar 1000 SCSI Reference Manual for all command

processing.

RMU Submenu

The Scalar 1000 is equipped with a Remote Management Unit (RMU) which allows web-based library management via the Ethernet port. The RMU Submenu allows the administrator to set the initial values of the RMU network parameters to allow for remote access.

When RMU is selected, the RMU Submenu is displayed. See Figure 5-106.

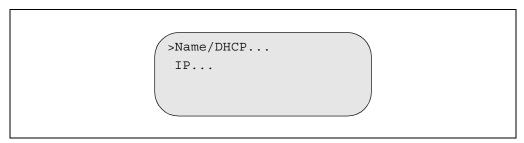


Figure 5-106 RMU Submenu

To choose one of the two selections, follow the steps.

Step 1 Press the button to select the Name/DHCP Dialog.

— or —

Press the value button or the button to select the IP Dialog.

Press the 🖊 button.

The selected menu appears. Refer to Name/DHCP Dialog on page 5-93 or IP Dialog on page 5-95.

Name/DHCP Dialog

When Name/DHCP is selected, the Name/DHCP Dialog is displayed. See Figure 5-107 on page 5-94. Name/DHCP allows the user to enable/disable Dynamic Host Communication Protocol (DHCP) and to define the host name for the RMU.

Setup Menu Selection 5-95

DHCP : N<
Name : webfoot3

Accept : N

Figure 5-107 Name/DHCP Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
DHCP	Y to enable DHCP communication N to disable the DHCP communication
Name	Indicates the host name assigned to the RMU for communicating with the library via the RMU (letters A Z and numbers 0 9).
Accept	Y to accept changes N to reject changes

Press the **u** button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If Y is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

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IP Dialog

When IP is selected, the IP Dialog is displayed. See Figure 5-108. The IP Dialog allows the user to set the IP, Subnet and Gateway network addresses for library communication via the RMU.

IP: 100<100.100.100 Sub: 225.225.225.225 Gat: 100.100.100 Accept: N

Figure 5-108 IP Dialog

Step 1 Press the utton to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
IP	Indicates the IP address (four sets of numbers 0 999)
Sub	Indicates the Subnet address (four sets of numbers 0 999)
Gat	Indicates the Gateway (four sets of numbers 0 999)
Accept	Y to accept changes N to reject changes
D 4 1 1	

Press the button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If \mathbf{Y} is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

O1 Aug 2000 Setup Menu Selection 5-95

Advanced Dialog

When Advanced is selected, the Advanced Dialog is displayed. See Figure 5-109. This option enables or disables the automatic configuration, calibration, and cartridge scan when the library has power cycled.

If Auto Inventory is disabled, the element status is not known until the host issues an Initialize Status command or an Inventory is performed via the Operator Panel.

If Auto Inventory is enabled, an automatic cartridge inventory is executed on each power cycle.

Any changes in the Operating Mode parameter value should be made by authorized Service Personnel. The default is set to 0.

Auto Teach : Y<
Auto Inventory: N
Operating Mode: 0
Accept: N

Figure 5-109 Advanced Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values in the following list.

-	· ·
Parameters	Values
Auto Teach	Y to enable Auto Teach for automatic configuration and calibration on each power cycle N to disable Auto Teach on each power cycle
Auto Inventory	Y to enable Auto Inventory for automatic cartridge scanning inventory on each power cycle N to disable Auto Inventory on each power cycle

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Operating Mode

 ${\bf 0}$ to select Normal mode of

operation

1 to select a 3 second delay before a Get operation is performed on a DLT drive after detecting that a tape was

ejected

2 to allow the Scalar 1000 to issue an UNLOAD command to the Model 4001S, Model 7001S, Model 8001S, AIT3102, AIT5002, AIT5102, and NCTP drives if the cartridge is not

ejected by the host

3 to activate options 1 and 2 4 to disable automatic cartridge recovery on PUT

failures

5 to activate options 1 and 4 **6** to activate options 2 and 4 **7** to activate options 3 and 4

Accept

Y to accept changes N to reject changes

Press the button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If **Y** is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

O1 Aug 2000 Setup Menu Selection 5-97

Drives Dialog

When Drives is selected, the Drives Dialog is displayed. See Figure 5-110. This options allows modification of the drive SCSI ID for the Model 4001S, Model 7001S, Model 8001S, AIT3102, AIT5002, AIT5102, and NCTP drives.

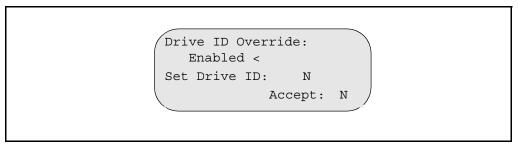


Figure 5-110 Drives Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Override	Enabled allows the operator to enable the setting of SCSI ID for supported drives Disabled prevents the library from setting the SCSI ID for supported drives
Set Drive ID	Y to view and set the drive SCSI ID N to not change the drive SCSI ID
Accept	Y to accept changes N to reject changes

If Enabled is selected or was previously selected for the Drive ID Override parameter and Y is selected for the Set Drive Id and the Accept parameters, the SCSI ID Dialog appears. Refer to Figure 5-111 on page 5-99.

Press the | **U** button to confirm the changes.

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If Drive ID Override is disabled and Y is selected for Accept, the changed parameters continue to display but no new screen action is displayed.

— or —

If **N** *is selected for the Accept parameter, the changed parameters continue to display but no action is taken.*

SCSI ID

Drive Next Now

1200< 01 01

Accept: N

Figure 5-111 SCSI ID Dialog

Step 2 Press the utton to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Drive	Indicates the element index of the drive (01200 01247 for DLT and 8mm) (01200 01215 for all half-inch)
Next	Next indicates the SCSI ID address that takes effect after power is cycled (0 15)
Now	The SCSI ID address that is currently in effect (0 15)
Accept	Y to accept changes N to reject changes

Press the $\begin{tabular}{l} \begin{tabular}{l} \b$

If Y is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

01 Aug 2000 Setup Menu Selection 5-9.

Cleaning Submenu

When Cleaning is selected, the Cleaning Submenu is displayed. This submenu offers two selections. See Figure 5-90. The Cleaning Submenu defaults to the Drives selection.

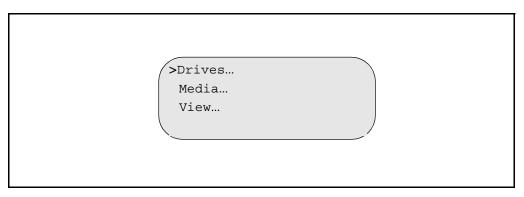


Figure 5-112 Cleaning Submenu

To choose one of the three selections, follow the steps.

Step 1 Press the button to select the Drives Dialog.

— or —

Press the value button or the button to select the Media Dialog or View Dialog.

Press the igspace button.

The selected menu appears. Refer to Drives Dialog on page 5-101, Media Dialog on page 5-103 or View Dialog on page 5-105.

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Drives Dialog

When Drives is selected, the Drives Dialog is displayed. See Figure 5-113. This option allows selection of automatic cleaning for Model 4001S, Model 7001S, Model 8001S, AIT3102, AIT5002, AIT5102, and NCTP drives.

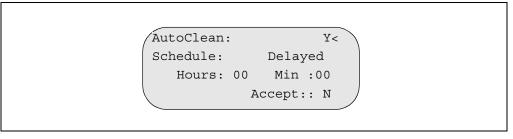


Figure 5-113 Drives Dialog

If Immediate cleaning is selected, no time values can be entered.

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
AutoClean	Y to enable automatic drive cleaning N to reject automatic drive cleaning
Schedule	Immediate to allow drive cleaning when requested by the drive Delayed to schedule drive cleaning for requesting drives at the specified time
Hours	Hour (00 23) that cleaning should start
Min	Minute (0 59) that cleaning should start
Accept	Y to accept changes N to reject changes

Step 2 Repeat Step 1 for all of the parameters in the list.

Press the $\begin{picture}(100,0) \put(0,0){\line(0,0){100}} \put(0,0){\lin$

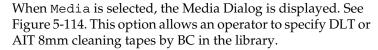
200 2 Telegram of the parameters in the ison

If \mathbf{Y} is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

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Media Dialog



A BC mask is a valid, partial barcode label that can be followed by a wildcard character (*). Barcode labels that match the mask are moved as cleaning tapes. The BC mask must not match more than a maximum of 127 cleaning tapes.

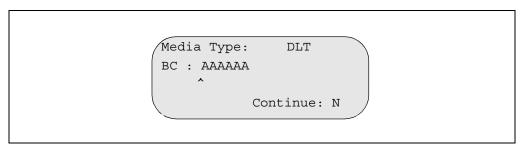


Figure 5-114 Media Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Media Type	Selects the medium type (DLT, 8mm, NCTP)
ВС	Indicates the BC mask of the cleaning cartridge(s)
Continue	Y to accept changes N to reject changes
Press the 🖊 butto	on to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If **Y** is selected for the Continue parameter value, the Usage Dialog appears. Refer to Figure 5-115 on page 5-104. Otherwise, the changed parameters continue to display but no action is taken.

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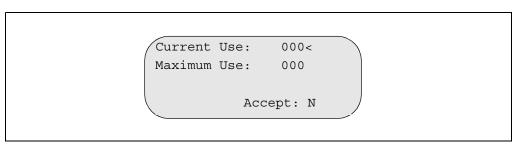


Figure 5-115 Usage Dialog

Press the

button to select the current Step 3 parameter value and move to the next parameter.

> Press the **v** button or the **b** button to toggle between the parameter values in the following list.

Parameters	Values
Current Usage	Specifies the number of times the cleaning cartridge has been used (000 511)
Maximum Usage	Specifies the number of times the cleaning cartridge can be used (000 511)
Accept	Y to accept changes N to reject changes

Press the $\begin{picture}(100,0) \put(0,0){\line(0,0){100}} \put(0,0){\lin$

If **Y** *is selected for the Accept parameter value, the screen updates to* reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

— or — Note If the BC mask selects more than 1 cleaning tape, the current and maximum usage parameter values are applied to each cleaning tape.

View Dialog

When View is selected, the View Dialog is displayed. See Figure 5-116. This option allows an operator to see a specific cleaning tape usage.

BC: CLN001 Status: Reset

Max: 000 Count: 000 Index: 001<RESET: N

Figure 5-116 View Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to view cleaning indices from 1 to 128.

Parameters	Values
ВС	Indicates the cleaning tape bar code label
Status	Expired: Cleaning tape has expired Missing: Configured cleaning tape is not present within the library Reset: Cleaning tape not configured Valid: Cleaning tape is configured and is usable
Max	Indicates the maximum allowed usage count (000 511)
Count	Indicates the current usage count
Index	Indicates the current cleaning tape database index
RESET	Y to accept changes N to reject changes

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Press the button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If \mathbf{Y} is selected for the Reset parameter value, the changed parameter values are accepted. Otherwise, the changed parameters continue to display but no action is taken.

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Utils Menu Selection

The Utils Menu is primarily used to execute various Scalar 1000 utilities. Utils is selected from the Main Menu by following this procedure.

Step 1 If necessary, press the button until the Main Menu appears.

The main Menu appears with the indicator positioned at Mode.

- Step 2 Press the ▼ button or the ▲ button to position the selection indicator at Utils.

The Utils Menu appears. This menu offers two selections. See Figure 5-117. The Utils Menu defaults to the Library selection.

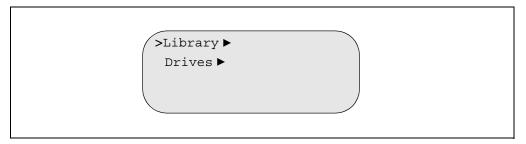


Figure 5-117 Utils Menu

To choose one of the two selections, follow the steps.

 $\textbf{Step 4} \qquad \text{Press the} \quad \color{red} \longleftarrow \quad \text{button to select the Library Submenu}.$

— or —

Press the **v** button or the **b** button to select Drives Submenu.

Press the 귙 button.

The selected menu appears. Refer to Library Submenu on page 5-108 or Drives Submenu on page 5-117.

01 Aug 2000 Utils Menu Selection 5-107

Library Submenu

When Library is selected, the Library Submenu is displayed. This submenu offers five selections. See Figure 5-118. The Library Submenu defaults to the Screen selection.

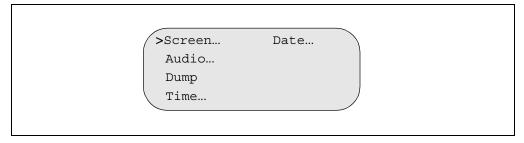


Figure 5-118 Library Menu

To choose one of the five selections, follow the steps.

Step 1 Press the button to select the Screen Dialog.

— or —

Press the v button or the button to select Audio Dialog, Dump, Time Dialog, or Date Dialog.

Press the $\begin{tabular}{ll} \begin{tabular}{ll} \begin{tabular}$

The selected dialog or screen appears. Refer to Screen Dialog on page 5-109, Audio Dialog on page 5-113, Dump on page 5-114, Time Dialog on page 5-115, or Date Dialog on page 5-116.

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Screen Dialog

When Screen is selected, the Screen Dialog is displayed. See Figure 5-119. This option controls the settings related to the physical Operator Panel LCD screen.

Backlight Enable: Y<
Use Screen Saver: N

Accept: N

Figure 5-119 Screen Dialog

Step 1 Press the utton to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values in the following list.

Parameters Values

Backlight enable Y to enable LCD backlighting N to disable LCD backlighting

Use Screen Saver Y to enable the screen saver N to disable the screen saver

Accept Y to accept changes
N to reject changes

Press the

button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If **Y** is selected for Use Screen Saver and Accept parameters, the Timeout Value Dialog appears. Refer to Figure 5-120 on page 5-110. Otherwise, the screen returns to the Library Menu. Refer to Figure 5-118 on page 5-108.

01 Aug 2000 Utils Menu Selection 5-109

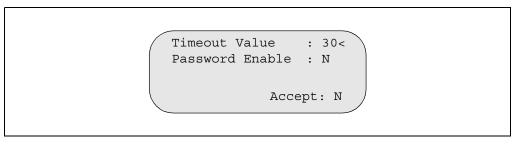


Figure 5-120 Timeout Value Dialog

Step 3 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Timeout Value	10 - 60 minutes (default = 30)
Password enable	Y to enable a screen saver password N to disable a screen saver password
Accept	Y to accept changes N to reject changes

Press the

button to confirm the changes.

Step 4 Repeat Step 3 for all of the parameters.

If Password enable changes from **N** to **Y** or **Y** to **N** and Accept changes to **Y**, the Password Dialog appears. See Figure 5-121. Otherwise, the screen returns to the Library Menu. Refer to Figure 5-118 on page 5-108.

Password enable can change from Y to N only if a password was

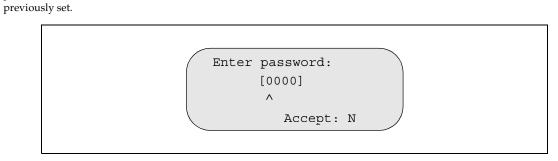


Figure 5-121 Password Dialog

Step 5 Press the utton to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values.

Parameters Values

Password Selects the password

(0000.9999)

Press the $\begin{tabular}{l} \begin{tabular}{l} \b$

- **Step 6** Repeat Step 5 for all password parameters.
- Step 7 Press the utton to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values.

Parameters Values

Accept Y to accept changes

N to reject changes

Press the | **\(\rightarrow \)** button to confirm the changes.

If Y is selected for the Accept parameter value while the Password enable is set to Y, the password is changed. See Figure 5-122.

The password has been changed.

Figure 5-122 Password Change Dialog

Otherwise, if **Y** is selected for the Accept parameter value while the Password enable is set to **N**, the password protection is removed. If the password is entered

Utils Menu Selection 5-111
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incorrectly, the following Invalid Dialog appears. See Figure 5-123.

You did not enter a valid password

Figure 5-123 Invalid Password Dialog

Step 8 Press the C button to return to the Password Dialog.

Audio Dialog

When Audio is selected, the Audio Dialog is displayed. See Figure 5-124. This option controls the settings to enable or disable the audio alarm.

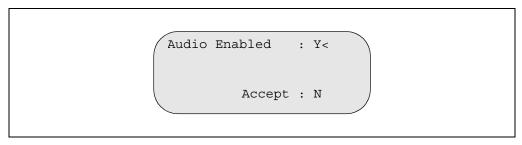


Figure 5-124 Audio Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values in the following list.

Parameters	Values
Audio Enable	Y to enable audio N to disable audio
Accept	Y to accept changes N to reject changes

Press the $\begin{picture}(100,0) \put(0,0){\line(0,0){100}} \put(0,0){\lin$

Step 2 Repeat Step 1 for all of the parameters in the list.

If Y is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

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Dump

When Dump is selected, the Response Screen is displayed after the dump execution is complete. See Figure 5-125. This option captures the current operating state of the library which consists of database, log, parameter, and trace information. The dump file may be retrieved by a SCSI **READ BUFFER** command.

The code dump is now completed.

Figure 5-125 Response Screen

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Time Dialog

When Time is selected, the Time Dialog is displayed. See Figure 5-126. This option sets the 24 hour time format of the library.

The library does not automatically adjust for Daylight Savings Time.

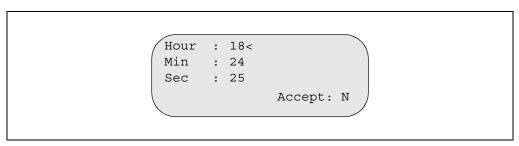


Figure 5-126 Time Dialog

Step 1 Press the utton to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Hour	Indicates the hour of the day (00 23)
Min	Indicates the minute of the hour (00 59)
Sec	Indicates the second of the minute (00 59)
Accept	Y to accept changes N to reject changes

Step 2 Repeat Step 1 for all of the parameters in the list.

Press the button to confirm the changes.

If **Y** is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

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Date Dialog

When Date is selected, the Date Dialog is displayed. See Figure 5-127. This option sets the date displayed by the library.

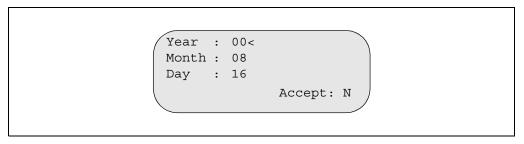


Figure 5-127 Date Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

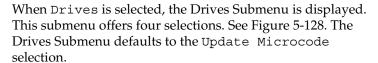
Parameters	Values
Year	Indicates the last two digits of the year (00 99)
Month	Indicates the two digits of the month (01 12)
Day	Indicates the two digits of the day (01 31)
Accept	Y to accept changes N to reject changes
Press the button to confirm the changes.	

Step 2 Repeat Step 1 for all of the parameters in the list.

If **Y** is selected for the Accept parameter value, the screen updates to reflect the changes. Otherwise, the changed parameters continue to display but no action is taken.

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Drives Submenu



The menu selection supports only Model 4001S, Model 7001S, Model 8001S, AIT3102, AIT5002, AIT5102, and NCTP drives.



Figure 5-128 Drives Submenu

To choose one of the four selections, follow the steps.

Step 3 Press the button to select the Update Microcode Dialog.

— or —

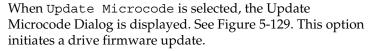
Press the button or the button to select Clean Drives Dialog, Unload Drives Dialog, or Initialize Submenu.

Press the \biguplus button.

The selected dialog or screen appears. Refer to Update Microcode Dialog on page 5-118, Clean Drives Dialog on page 5-123, Unload Drives Dialog on page 5-125, or Initialize Submenu on page 5-127.

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Update Microcode Dialog



The operator must determine the location coordinate or element address of the firmware update tape prior to following this procedure.

Enter SOURCE
Coord: I 01 1< A 12
OR Element: 01193
Accept: N

Figure 5-129 Update Microcode Dialog

Step 1 Press the button to select the current parameter default value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle the Coordinate parameter values.

Parameters Values Coord The first

The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell)
The second field indicates the module number which can be modified if expansion modules are present (1 .. 4)
The third field indicates the storage cell section (1 .. 4), drive bay (1 .. 2), or IE station number
The fourth field indicates the column of the section (A .. E),

drive port (A .. B) or IE station

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column

The fifth field indicates the row of the column. (01 .. 12 for half inch and DLT coordinates) (01 .. 18 for 8mm coordinates)

Element Indicates the element number

which corresponds with the

coordinate parameter

Accept Y to accept changes

N to reject changes

Press the button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameter in the list.

If Y is selected for the Accept parameter value, the Element Dialog appears. See Figure 5-130. Otherwise, the changed actions continue to display but no action is taken.

Enter TARGET

Coord: D 01 1< A 01 OR Element:01200

Accept : N

Figure 5-130 Element Dialog

Step 3 Press the button to select the current parameter default value and move to the next parameter.

— or —

Press the values. button or the button to toggle the parameter values.

Parameters Values

Coord The first field indicates the

type of cell (I for I/E Station, D for Drive, S for Storage cell) The second field indicates the module number which can be modified if expansion modules

are present (1 .. 4)

The third field indicates the storage cell section (1 .. 4),

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drive bay (1 .. 2), or IE station number

The fourth field indicates the column of the section (A .. E), drive port (A .. B) or IE station column

The fifth field indicates the row of the column. (01 .. 12 for all half inch and DLT

coordinates)

(01 .. 18 for 8mm coordinates)

Element Indicates the element number

which corresponds with the

coordinate parameter

Accept Y to accept changes N to reject changes

Press the

button to confirm the changes.

Step 4 Repeat Step 3 for all of the parameter in the list.

If **Y** is selected for the Accept parameter value, the Drive Range Dialog appears. See Figure 5-131. Otherwise, the changed actions continue to display but no action is taken.

Drive Range: 01<

Accept: N

Figure 5-131 Drive Range Dialog

Step 5 Press the button to select the current parameter default value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle the parameter values.

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Parameters Values

Drive Range Indicates the number of drives

to receive the firmware

update.

Drives are in order of their

element address

Accept Y to accept changes

N to reject changes

Press the $\begin{tabular}{l} \begin{tabular}{l} \b$

Step 6 Repeat Step 5 for all of the parameter in the list.

If **Y** is selected for the Accept parameter value, the two Response Screen appears. See Figure 5-132. Otherwise, the changed actions continue to display but no action is taken.

-UPDATE MICROCODE-Cycle 1 of 3 Status: Running

Cancel: N<

Figure 5-132 Response Screen

Step 7 Press the default value.

— or —

Press the values. button to toggle the Cancel parameter values.

Parameters Values

Status Running indicates that the current command is in progress.

Completed indicates the firmware on all the drives in the cycle has been updated.

Canceled indicates the cycle has been canceled

ERROR! indicates an error has

occurred

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 $\begin{array}{c} \text{Cancel} & \textbf{Y} \text{ to cancel the cycle} \\ \textbf{N} \text{ to continue the cycle} \end{array}$

Press the **u** button to confirm the changes.

If **Y** *is selected for the Cancel parameter, the cycle is canceled and the Cancel parameter does not appear.*

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Clean Drives Dialog

When Clean Drives is selected, the Clean Drives Dialog is displayed. See Figure 5-133. This option initiates a drive cleaning operation.

Enter TARGET
Coord: D< 01 1 A 01
OR Element: 01200
Accept: N

Figure 5-133 Clean Drives Dialog

Step 1 Press the button to select the current parameter default value and move to the next parameter.

— or —

Press the v button or the button to toggle the Coordinate parameter values.

Parameters	Values
Coord	The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell) The second field indicates the module number which can be modified if expansion modules are present (1 4) The third field indicates the storage cell section (1 4), drive bay (1 2), or IE station number The fourth field indicates the column of the section (A E), drive port (A B) or IE station column The fifth field indicates the row of the column. (01 12 for half inch and DLT coordinates) (01 18 for 8mm coordinates)
Element	Indicates the element number which corresponds with the coordinate parameter

Utils Menu Selection 5-123

Accept Y to accept changes N to reject changes

Press the button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameter in the list.

If \mathbf{Y} is selected for the Accept parameter value, the Progress Screen appears, see Figure 5-134, followed by the Response Screen, see Figure 5-135. Otherwise, the changed actions continue to display but no action is taken.

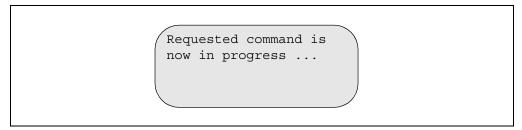


Figure 5-134 Progress Screen

Requested command is now complete.

Figure 5-135 Response Screen

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Unload Drives Dialog

When Unload Drives is selected, the Unload Drives Dialog is displayed. See Figure 5-136. This option initiates a tape eject operation from the specified drive.

Enter SOURCE
Coord: D 01< 1 A 01
OR Element: 01200
Accept: N

Figure 5-136 Unload Drives Dialog

Step 1 Press the default value and move to the next parameter.

— or —

Press the v button or the button to toggle the parameter values.

Parameters	Values
Coord	The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell) The second field indicates the module number which can be modified if expansion modules are present (1 4) The third field indicates the storage cell section (1 4), drive bay (1 2), or IE station number The fourth field indicates the column of the section (A E), drive port (A B) or IE station column The fifth field indicates the row of the column. (01 12 for half inch and DLT coordinates) (01 18 for 8mm coordinates)
Element	Indicates the element number which corresponds with the coordinate parameter

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Accept Y to accept changes N to reject changes

Press the button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameter in the list.

If \mathbf{Y} is selected for the Accept parameter value, the Progress Screen appears, see Figure 5-137, followed by the Response Screen, see Figure 5-138. Otherwise, the changed actions continue to display but no action is taken.

Requested command is now in progress ...

Figure 5-137 Progress Screen

Requested command is now complete.

Figure 5-138 Response Screen

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Initialize Submenu

When Initialize is selected, the Initialize Submenu is displayed. This submenu offers two selections. See Figure 5-139. The Initialize Submenu defaults to the Communication selection.

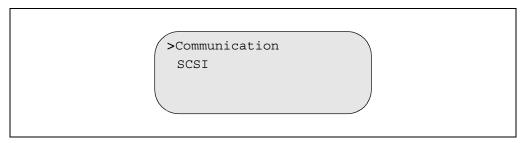


Figure 5-139 Initialize Submenu

To choose one of the two selections, follow the steps.

Step 3 Press the

button to select Communication.

or —

Press the

button or the

button to select SCSI.

Press the

button.

The selected screen appears. Refer to Communication on page 5-128 or SCSI on page 5-129.

Utils Menu Selection 5-127

Communication

When Communication is selected, the Progress Screen, see Figure 5-140, followed by the Response Screen, see Figure 5-141, appear. This option initiates communication tests to drives and initializes the drive state of Model 4001S, Model 7001S, Model 8001S, AIT3102, AIT5002, AIT5102, and NCTP appropriately.

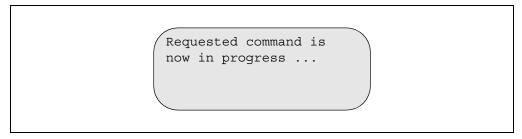


Figure 5-140 Progress Screen

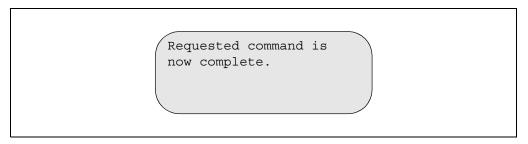


Figure 5-141 Response Screen

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SCSI

When SCSI is selected, all SCSI IDs are initialized to the SCSI IDs previously set by the operator. The Progress Screen, see Figure 5-141, followed by the Response Screen, see Figure 5-142, appear.

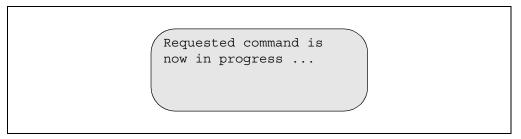


Figure 5-142 Progress Screen

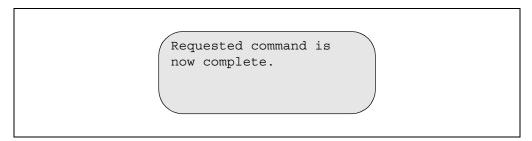


Figure 5-143 Response Screen

Utils Menu Selection 5-129
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Service Menu Selection

The Service Menu is primarily used to execute various Scalar 1000 diagnostics and exercisers. These options are primarily intended for trained service representatives. Service is selected from the Main Menu by following this procedure.

- Step 1 If necessary, press the button until the Main Menu appears.
- Step 2 Press the very button or the deput button to position the selection indicator at Service.
- Step 3 Press the button.

The Service Menu appears. This menu offers six selections. See Figure 5-144. The Service Menu defaults to the Start selection.



Figure 5-144 Service Menu

To choose one of the six selections, follow the steps.

Step 4 Press the button to select the Start Dialog

Press the value button or the button to select the Diags Submenu, Teach Submenu, SAC Dialog, Demo Dialog, or Advanced Dialog.

Press the 🖊 button.

— or —

The selected menu appears. Refer to Start Dialog on page 5-131, Diags Submenu on page 5-133, Teach Submenu on page 5-167, SAC Dialog on page 5-172, Demo Dialog on page 5-172, or Advanced Dialog on page 5-175.

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Start Dialog

When Start is selected, the Preventative Maintenance (PM) Due Dialog, see Figure 5-145, is displayed. If a reset of the PM values is selected, the Confirm Change Dialog, see Figure 5-146, is displayed. The menu flow continues with either Start Dialog with No Errors or Start Dialog with Errors.

PM Due: 01/01/98
X Remain: 00500000
Y Remain: 000500000
Reset PM values? N<

Figure 5-145 Preventive Maintenance Due Dialog

Step 1 Press the button to select the current parameter value.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters Values

Reset PM values
Y to reset PM values
N to keep PM values

Press the | **\(\upsilon** | button to confirm the changes.

If **Y** is selected for the Reset PM values parameter value, the Confirm Change Dialog is displayed. See Figure 5-146. Otherwise, the flow continues with either the Start Dialog with No Errors, refer to Figure 5-147 on page 5-132, or the Start Dialog with Errors, refer to Figure 5-148 on page 5-133, display.

Confirm change? N<

Figure 5-146 Confirm Change Dialog

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Step 2 Press the button to select the current parameter value.

— or —

Press the **v** button or the **b** button to toggle between the parameter values in the following list.

Parameters Values

Confirm change Y to accept changes to PM

values.

N to reject changes to PM

values.

Press the

button to confirm the changes.

If **Y** is selected for the Confirm Change parameter value and no errors were present, the Start Dialog with No Error, see Figure 5-147, is displayed.

If **Y** is selected for the Confirm Change parameter value and recent errors were present, the Start Dialog with Errors, refer to Figure 5-148 on page 5-133, is displayed. This option provides information for a service call. The Service Action Code (SAC) is based on the displayed error code. Refer to Service Action Codes on page 7-3 for additional information. Refer to document number 600838-D Scalar 1000 Maintenance Manual for a course of action related to the displayed SAC.

If N is selected for the Confirm Change parameter value, the Preventative Maintenance Due is displayed.

There are no more SACs to report

Figure 5-147 Start Dialog with No Errors

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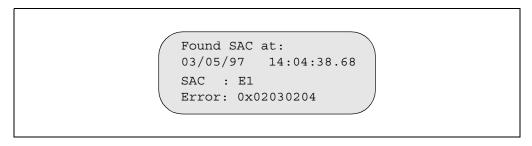
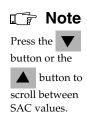


Figure 5-148 Start Dialog with Error



Diags Submenu

Diagnostics are grouped according to functional areas.

When Diags is selected, the Diags Submenu is displayed. This menu offers six selections. See Figure 5-149. The Diags Submenu defaults to the DI/DO selection.

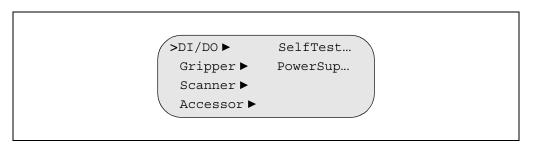


Figure 5-149 Diags Submenu

To choose one of the six selections, follow the steps.

Service Menu Selection 5-133

Press the v button or the button to select the Gripper Submenu, Scanner Submenu, Accessor Submenu, SelfTest Dialog, or PowerSup Dialog.

Press the 🖊 button.

The selected menu appears. Refer to DI/DO Submenu on page 5-135, Gripper Submenu on page 5-143, Scanner Submenu on page 5-154, Accessor Submenu on page 5-159, SelfTest Dialog on page 5-164, or PowerSup Dialog on page 5-165.

DI/DO Submenu

Use these tests to isolate problems in the system.

When DI/DO is selected, the DI/DO Submenu is displayed. This menu offers three selections. See Figure 5-150. The DI/DO Submenu defaults to the Loopback selection.

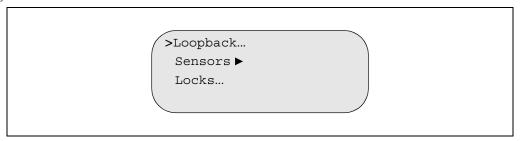


Figure 5-150 DI/DO Submenu

To choose one of the three selections, follow the steps.

Step 1 Press the

button to select the Loopback Dialog.

or —

Press the

button or the

button to select the Sensors Dialog or Locks Dialog.

Press the

button.

The selected menu appears. Refer to Loopback Dialog on page 5-136, Sensors Submenu on page 5-138, or Locks Dialog on page 5-142.

Service Menu Selection 5-135

Loopback Dialog

When Loopback is selected, the Loopback Dialog is displayed. See Figure 5-151. This option sends test signals from the main control card to other system cards and back.

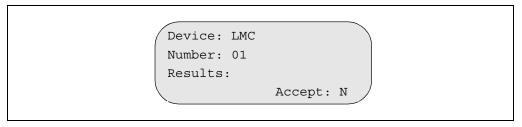


Figure 5-151 Loopback Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Device	Indicates the loopback tests to run (LMC, LGR, LPN)
Number	Indicates which device number should be tested. This field is always set to 01 because there is only one of each device to be tested in the Scalar 1000
Accept	Y to accept changes N to reject changes

Step 2 Repeat Step 1 for all of the parameters in the list.

Press the button to confirm the changes.

If **Y** is selected for the Accept parameter value, the Response Screen appears. Refer to Figure 5-152 on page 5-137. Otherwise, the changed parameters continue to display but no action is taken.

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Device: LMC Number: 01

Results: PASSED

Accept: N

Figure 5-152 Response Dialog

Parameters	Values
Results	Passed indicates that the test executed successfully Failed indicates that the test did not execute successfully
Accept	Y to accept change N to reject changes

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Sensors Submenu

When Sensors is selected, the Sensors Submenu is displayed. This menu offers two selections. See Figure 5-154. The Sensors Submenu defaults to the Wrap selection.

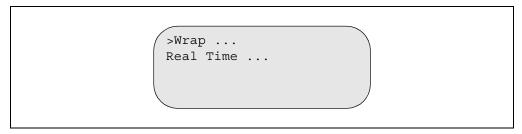


Figure 5-153 Sensors Submenu

To choose one of the two selections, follow the steps.

Step 1 Press the

button to select the Wrap Dialog.

or —

Press the

button or the

button to select the Real Time Dialog.

Press the

button.

The selected menu appears. Refer to Wrap Dialog on page 5-139 or Real Time on page 5-141.

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Wrap Dialog

When Wrap is selected, the Wrap Dialog is displayed. See Figure 5-154. This option tests the ability of the system sensors to report state changes.

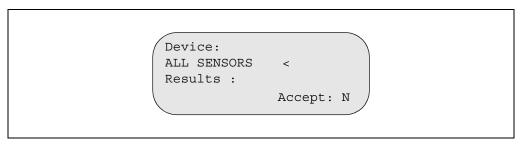


Figure 5-154 Wrap Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Device	Indicates the list of sensors to test (All, Gripper_Tach, IE_Lock, Y_Home, X_Home, Touch_Tip, Gripper_Open, Retract_Complete, IE_Open)
Accept	Y to accept changes N to reject changes

Press the **U** button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If **Y** is selected for the Accept parameter value, the Response Screen appears. Refer to Figure 5-155 on page 5-140. Otherwise, the changed parameters continue to display but no action is taken.

Service Menu Selection 5-139
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Device:
ALL <
Results : Passed
Accept: N

Figure 5-155 Response Dialog

Parameters	Values
Results	Passed indicates that the test executed successfully Failed indicates that the test did not execute successfully
Accept	Y to accept changes N to reject changes

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Real Time

When Real Time is selected, the Real Time screen is displayed. See Figure 5-156. This option indicates the state changes of the sensors and allows real time viewing of the state changes.

GripTach=0 YHome=0
TouchTip=0 XHome=0
GripOpen=0 IELock=0
RetrComp=0 IEOpen=0

Figure 5-156 Real Time Screen

Parameters	Values
GripTach	0 indicates an ON state 1 indicates an OFF state
TouchTip	0 indicates an ON state 1 indicates an OFF state
GripOpen	0 indicates an ON state1 indicates an OFF state
RetrComp	0 indicates an ON state 1 indicates an OFF state
YHome	0 indicates an ON state 1 indicates an OFF state
XHome	0 indicates an ON state 1 indicates an OFF state
IELock	0 indicates an ON state 1 indicates an OFF state
IEOpen	0 indicates an ON state 1 indicates an OFF state

Service Menu Selection 5-141
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When Locks is selected, the Locks Dialog is displayed. See Figure 5-157. This option exercises the I/E station lock without having to open and close the station.

If media removal has been prevented by the host, the I/E station can not be unlocked.



Pressing Enter will toggle the lock.
State : Unlocked

Figure 5-157 Locks Dialog

State Locked indicates that the	
Insert/Eject station is lock Unlocked indicates that the Insert/Eject station is unlocked	

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Gripper Submenu

When Gripper is selected, the Gripper Submenu is displayed. This menu offers two selections. See Figure 5-158. The Gripper Menu defaults to the Get/Put Storage selection.

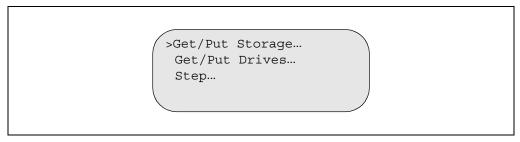


Figure 5-158 Gripper Submenu

To choose one of the three selections, follow the steps.

Step 1 Press the Dialog.

— or —

Press the ✓ button or the ▲ button to select the Get/Put Storage Dialog.

Press the ✓ button or the ▲ button to select the Get/Put Drives Dialog or Step Dialog

Press the ✓ button.

The selected menu appears. Refer to Get/Put Storage Dialog on page 5-144, Get/Put Drives Dialog on page 5-148, or Step Dialog on page 5-152.

Service Menu Selection 5-143
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Get/Put Storage Dialog

When Get/Put Storage is selected, the Get/Put Storage Dialog is displayed. See Figure 5-159. This option does an in place GET and PUT of all cartridges in the specified range. No element to element movements are allowed.

The gripper test will get/put media
Cycles to run: 009<
[more]

Figure 5-159 Get/Put Storage Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values in the following list.

Parameters Values

Cycles to run Indicates the number of cycles to run (1 .. 999)

[more] More selections on the Continuation Menu

Press the button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

When [more] is selected, the Continuation Dialog appears. See Figure 5-160.

Enter SOURCE
Coord: S 01< 2 A 01
OR Element: 00000
Accept: N

Figure 5-160 Continuation Dialog

Step 3 Press the default value and move to the next parameter.

— or —

Press the values. button or the button to toggle the Coordinate parameter values.

Parameters	Values
Coord	The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell) The second field indicates the module number which can be modified if expansion modules are present (1 4) The third field indicates the storage cell section (1 4), drive bay (1 2), or IE station number The fourth field indicates the column of the section (A E), drive port (A B) or IE station column The fifth field indicates the row of the column. (01 12 for half inch and DLT coordinates) (01 18 for 8mm coordinates)
Element	Indicates the element number which corresponds with the coordinate parameter
Accept	Y to accept changes N to reject changes
D 4 1 4	

Step 4 Repeat Step 3 for all of the parameter in the list.

Press the $\begin{picture}(100,0) \put(0,0){\line(0,0){100}} \put(0,0){\lin$

If **Y** is selected for the Accept parameter value, the Number of Elements Dialog appears. Refer to Figure 5-161 on page 5-146. Otherwise, the changed parameters continue to display but no action is taken.

Service Menu Selection 5-145

Number of Elements
to Get/Put : 0100

Accept : N

Figure 5-161 Number of Elements Dialog

Step 5 Press the button to select the current parameter default value and move to the next parameter.

— or —

Press the button or the button to toggle the parameter values.

Parameters Values

Get/Put Selects the number of elements where get/put operations are applied (0000 .. 1181)

Accept Y to accept changes
N to reject changes

Press the $\begin{tabular}{ll} \begin{tabular}{ll} \begin{tabular}$

Step 6 Repeat Step 5 for each parameter in the list.

If **Y** is selected for the Accept parameter value, the Response Dialog appears. Refer to Figure 5-162 on page 5-146. Otherwise, the changed parameters continue to display but no action is taken.

DIAGS GRIPPER TEST
Cycle: 006 of 009
Status: Running
Cancel: N<

Figure 5-162 Response Dialog

Step 7 Press the button or the button to toggle the Cancel parameter values.

Parameters	Values
Cycle	The number of completed test cycles of the requested cycles
Status	Shows the status of the indicated cycle (Running, Completed, Error, Canceled)
Cancel	Y to cancel the test. N to continue running the test.
Press the 귙 butto	on to confirm the changes.

If the operation stops, the Cancel parameter no longer displays.

If **Y** *is selected for the Cancel parameter value*, *the test is cancelled. Otherwise*, *the test continues.*

Service Menu Selection 5-147
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When Get/Put Drives is selected, the Get/Put Drives Dialog is displayed. See Figure 5-163. This option does an in place GET and PUT of all cartridges in the specified range to the specified drive(s).

The menu selection supports only Model 4001S, Model 7001S, Model 8001S, AIT3102, AIT5002, AIT5102, and NCTP drives.

The gripper test will get/put media Cycles to run: 009< [more]

Figure 5-163 Get/Put Drives Dialog

Step 1 Press the

button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values in the following list.

Parameters Values Indicates the number of cycles Cycles to run to run (1 .. 999) [more] More selections on the Continuation Menu Press the button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

> When [more] is selected, the Continuation Menu appears. Refer to Figure 5-164 on page 5-149.

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Enter SOURCE Coordinate : D 01 1< A 01 OR Element : 01200 Accept : N

Figure 5-164 Continuation Dialog

Step 3 Press the button to select the current parameter default value and move to the next parameter.

— or —

Press the values. button or the button to toggle the Coordinate parameter values.

Parameters	Values
Coord	The first field indicates the type of cell (I for I/E Station, D for Drive, S for Storage cell) The second field indicates the module number which can be modified if expansion modules are present (1 4) The third field indicates the storage cell section (1 4), drive bay (1 2), or IE station number The fourth field indicates the column of the section (A E), drive port (A B) or IE station column The fifth field indicates the row of the column. (01 12 for half inch and DLT coordinates) (01 18 for 8mm coordinates)
Element	Indicates the element number which corresponds with the coordinate parameter
Accept	Y to accept changes N to reject changes

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Press the
button to confirm the changes.

Step 4 Repeat Step 3 for all of the parameter in the list.

If **Y** is selected for the Accept parameter value, the Number of Elements Dialog appears. See Figure 5-165. Otherwise, the changed parameters continue to display but no action is taken.

Number of Drives
to Get/Put : 0010<

Accept : N

Figure 5-165 Number of Elements Dialog

Step 5 Press the button to select the current parameter default value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle the parameter values.

Parameters Values

Get/Put Selects the number of elements where the Get/Put operation is applied (0000 .. 0048 for all elements)

Accept Y to accept changes
N to reject changes

Press the $\begin{picture}(100,0) \put(0,0){\line(0,0){100}} \put(0,0){\lin$

Step 6 Repeat Step 5 for all of the parameter in the list.

If **Y** is selected for the Accept parameter value, the Response Dialog appears. Refer to Figure 5-166 on page 5-151. Otherwise, the changed parameters continue to display but no action is taken.

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DIAGS GRIPPER TEST
Cycle : 006 of 009

Status: Running

Cancel: N<

Figure 5-166 Response Dialog

Step 7 Press the ▼ button or the △ button to toggle the Cancel parameter values.

Parameters	Values
Cycle	The number of completed test cycles of the requested cycles
Status	Shows the status of the indicated cycle (Running, Completed, Error, Canceled)
Cancel	Y to cancel the test. N to continue running the test.

If the operation stops, the Cancel parameter no longer displays.

Press the **J** button to confirm the changes.

If **Y** *is selected for the Cancel parameter value, the test is cancelled. Otherwise, the test continues.*

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Step Dialog

When Step is selected, the Step Dialog is displayed. See Figure 5-167. This option provides low level control of Gripper functions. The function should be used by trained service personnel.

This test should be used by trained personnel ONLY!

Continue: N<

Figure 5-167 Step Dialog

Step 1 Press the button to select the current parameter value.

— or —

Press the values. button or the button to toggle between the parameter values.

Parameters Values

Continue Y to continue the test.

N to cancel the test

If **Y** *is selected for the Continue parameter value, the Response Screen appears. See Figure 5-168.*

Arrow changes states.

Grip: OPEN<
Reach: RETRACTED
Speed: NORMAL

Figure 5-168 Continuation Dialog

Step 2 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the button or the button to toggle between the parameter values in the following list.

Parameters	Values
Grip	Open indicates that the Gripper is open Closed indicates that the Gripper is closed
Reach	Retracted indicates that the Gripper is retracted Extended indicates that the Gripper is extended
Speed	Normal uses predefined normal speed Slow uses predefined slow speed

Press the button to confirm the changes.

Step 3 Repeat Step 1 for the desired parameters in the list.

Service Menu Selection 5-153
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Scanner Submenu

When Scanner is selected, the Scanner Submenu is displayed. This submenu offers two selections. See Figure 5-169. The Scanner Menu defaults to the Adjust selection.

```
>Adjust...
Triger...
Fiducial Test...
```

Figure 5-169 Scanner Submenu

To choose one of the two selections, follow the steps.

Step 1 Press the

button to select the Adjust Dialog.

or —

Press the

button or the

button to select the Trigger Dialog.

Press the

button.

The selected menu appears. Refer to Adjust Dialog, on

The selected menu appears. Refer to Adjust Dialog on page 5-155, Trigger Dialog on page 5-156, or Fiducial Test Dialog on page 5-157.

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Adjust Dialog

When Adjust is selected, the Adjust Dialog is displayed. See Figure 5-170. This option positions the barcode scanner beam over a specific location. This option is used by Customer Engineer to adjust the beam. Refer to the *Scalar 1000 Maintenance Guide* for the step by step procedure to adjust the scanner.

DIAGS SCANNER ADJUST Adjust scanner until beam is level. Y Position: 1002.0<

Figure 5-170 Adjust Dialog

Step 1 Press the ▼ button or the ▲ button to alter the Y position parameter values.

Parameters	Values
Y Position	Indicates the returned vertical position value of the scanner

Service Menu Selection 5-155 01 Aug 2000

Trigger Dialog

When Trigger is selected, the Trigger Dialog is displayed. See Figure 5-171. This option triggers the barcode scanner to read, decode, and display whatever barcode label is within the range of the beam.

SCANNER TRIGGER
Pressing Enter will
trigger scanner
BC :000389

Figure 5-171 Response Screen

Step 1	Press the	4	button to	trigger	the scanner.
Ottop I	I I COO CITC		D GLUGII U	****	tite bearing

Parameters	Values
ВС	Returns the barcode label information for the storage cartridge.

5-156 Menus and Commands 600561-A

Fiducial Test Dialog

When Fiducial Test is selected, the Fiducial Test Dialog is displayed. See Figure 5-172. This option allows the operator to test the scanner to determine if it is functioning properly.

Loops: 00 Test: 1
Xcnt: 000000
Ycnt: 000000
Continue: Y<

Figure 5-172 Fiducial Test Dialog

Step 1 Press the utton to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values in the following list.

Parameters	Values
Test	 will read the first storage fiducial and display the found edge coordinates. will read the Insert/Eject Station fiducial and display the found edge coordinates.
Continue	Y to continue running the test. N to cancel the test.

Press the button to confirm the changes.

The value of the Loops parameter in the Fiducial Test Dialog is supplied by the library firmware and can not be changed. The Loop parameter indicates how often the test has been run.

The value of the XCnt parameter in the Fiducial Test Dialog is supplied by the library firmware and can not be changed. The XCnt parameter indicates the x edge position count in tenths of a mm.

The value of the YCnt parameter in the Fiducial Test Dialog is supplied by the library firmware and can







Service Menu Selection 5-157
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not be changed. The YCnt parameter indicates the Y edge position count in tenths of a mm.

Step 2 Repeat Step 1 several times to ensure the X and Y position counts are within 10 tenths of a mm each time the test is run.

5-158 Menus and Commands

Accessor Submenu

When Accessor is selected, the Accessor Submenu is displayed. This menu offers two selections. See Figure 5-173. The Accessor Submenu defaults to the Move selection.

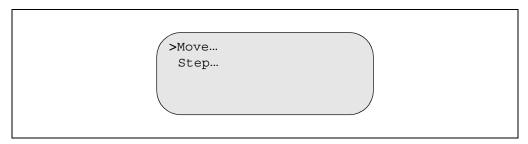


Figure 5-173 Accessor Submenu

To choose one of the two selections, follow the steps.

Step 1 Press the

button to select the Move Dialog.

or —

Press the

button or the

button to select the Step Dialog.

Press the

button.

The selected menu appears. Refer to Move Dialog on

page 5-160, or Step Dialog on page 5-162.

Service Menu Selection 5-159
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Move Dialog

When Move is selected, the Move Dialog is displayed. See Figure 5-174. This options moves the accessor in a figure eight pattern without accessing cartridges.

The accessor test
does corner moves.
Cycles to run: 009<
Accept: N

Figure 5-174 Move Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values in the following list.

Parameters Values

Cycles to Run Indicates the desired cycle count (001 .. 999)

Accept Y to accept changes
N to reject changes

Press the $\begin{tabular}{ll} \begin{tabular}{ll} \begin{tabular}$

Step 2 Repeat Step 1 for all of the parameters in the list.

If **Y** is selected for the Accept parameter value, the Response Screen appears. Refer to Figure 5-175 on page 5-161. Otherwise, the changed parameters continue to display but no action is taken.

5-160 Menus and Commands 600561-A

DIAGS ACCESSOR TEST

Cycle: 006 of 009 Status: Running

Cancel: N<

Figure 5-175 Response Dialog

Step 3 Press the ▼ button or the ▲ button to toggle the Cancel parameter values.

Parameters Values

Cancel Y to cancel the test.

N to continue running the test.

Press the button to confirm the changes.

The value of the Cycle parameter in the Response Dialog is supplied by the library firmware and can not be changed. The Cycle parameter indicates the number of completed test cycles of requested cycles.

The value of the Status parameter in the Response Dialog is supplied by the library firmware and can not be changed. The Status parameter shows the status of the indicated cycle (Running, Completed, Error, Canceled).

If **Y** *is selected for the Cancel parameter value, the test is cancelled. Otherwise, the test continues.*

If the operation stops, the Cancel parameter no longer displays.





Service Menu Selection 5-161
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Step Dialog

When Step is selected, the Step Dialog is displayed. See Figure 5-176. This option provides low level control of the accessor. The option should be used by trained service personnel.

This test should be used by trained personnel ONLY!

Continue: N<

Figure 5-176 Step Dialog

Step 1 Press the button to select the current parameter value.

— or —

Press the values. button or the button to toggle between the parameter values.

Parameters Values

Continue Y to continue the test.

N to cancel the test

If **Y** *is selected for the Continue parameter value, the Response Screen appears. See Figure 5-177.*

Use Arrows to Move
X axis: 0539.0mm<
Y axis: 0000.0mm
Amount: 001.0mm

Figure 5-177 Movement Dialog

5-162 Menus and Commands 600561-A

Press the 🔻

button or the

button to move the selected axis by the specified amount.

Use the

button to move between the parameters.

Parameters

Values

X axis

Amount

Indicates X axis location Indicates Y axis location

Y axis

Indicates move step distance

(1, 10 .. 100 mm)

Service Menu Selection 5-163 01 Aug 2000

SelfTest Dialog

When SelfTest is selected, the SelfTest Dialog is displayed. See Figure 5-178. This option executes a predetermined sequence of diagnostics and exercisers.

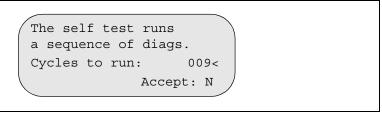


Figure 5-178 SelfTest Dialog

Step 1 Press the button to select the current parameter values and move to the next parameter.

— or —

Press the **v** button or the **b** button to toggle between the parameter values in the following list.

Parameters	Values
Cycles to Run	Indicates the desired cycle count (001 999)
Accept	Y to accept changes N to reject changes
Press the butto	on to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If Y is selected for the Accept parameter value, the Response Dialog appears. See Figure 5-179. Otherwise, the changed parameters continue to display but no action is taken.

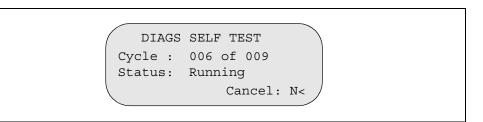


Figure 5-179 Response Dialog

Step 3 Press the ▼ button or the button to toggle the Cancel parameter values.

Parameters	Values
Cycle	The number of completed test cycles of the requested cycles
Status	Shows the status of the indicated cycle (Running, Completed, Error, Canceled)
Cancel	Y to cancel the test. N to continue running the test.

If the operation stops, the Cancel parameter no longer displays.

Press the

button to confirm the changes.

If **Y** *is selected for the Cancel parameter value, the test is cancelled. Otherwise, the test continues.*

PowerSup Dialog

When PowerSup is selected, the Power Supply Screen is displayed if dual power supplies are installed. See Figure 5-180. This screen shows installed DC power supply status with respect to AC input and DC output, indicating whether the power supplies are functioning properly. If dual power supplies are not installed, the Function Not Available Screen appears. See Figure 5-181.

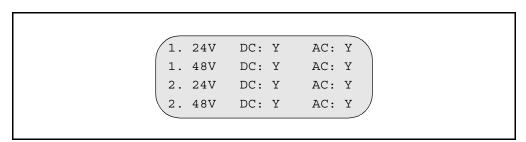


Figure 5-180 Power Supply Screen

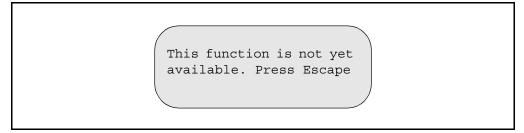


Figure 5-181 Function Not Available

Service Menu Selection 5-165

Step 1 Press the button to return to the Diags Submenu.

5-166 Menus and Commands

Teach Submenu

When Teach is selected, the Teach Submenu is displayed. This submenu offers two selections. See Figure 5-182. The Teach menu defaults to the Teach New selection.

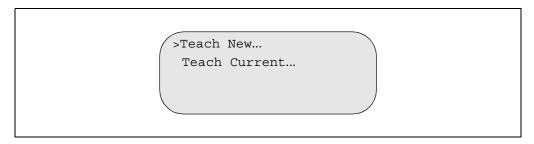


Figure 5-182 Teach Submenu

To choose one of the two selections, follow the steps.

Step 1 Press the → button to select the Teach New Dialog.

— or —

Press the → button or the → button to select the Teach Current Dialog.

Press the → button.

The selected menu appears. See Teach New Dialog or

Teach Current Dialog on page 5-169.

Teach New Dialog

The Teach New operation clears all cell statistics

When Teach New is selected, the Teach New Dialog is displayed. Refer to Figure 5-183 on page 5-168. This option resets and re-initializes the library configuration and calibration information. All previous information is destroyed. An inventory is required after the Teach New operation.

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A teach new will clear and reset the complete database.

Continue: N

Figure 5-183 Teach New Dialog

Step 1 Press the button to select the current parameter value.

— or —

Press the button or the button to toggle between the parameter values.

Parameters Values

Continue Y to continue the teach new.
N to return to the previous menu

If **Y** is selected for the Continue parameter value, the *Progress Screen*, see Figure 5-184, followed by the Response Screen, see Figure 5-185, appear.

The requested teach is in progress...

Figure 5-184 Progress Screen

5-168 Menus and Commands 600561-A

The requested teach completed OK.

Figure 5-185 Response Screen

Teach Current Dialog

When Teach Current is selected, the Teach Current Dialog is displayed. See Figure 5-186. This option re-calibrates the library coordinate information. All previous configuration and inventory information is retained.

A teach current will reset the positional information only.

Continue: N

Figure 5-186 Teach Current Dialog

Step 1 Press the value. button to select the current parameter value.

— or —

Press the button or the button to toggle between the Continue parameter values.

Parameters Values

Continue Y to continue the teach current

N to return to the previous

menu

If Y is selected for the Continue parameter value, the Starting and Ending Dialog Screen appears. Refer to Figure 5-188 on page 5-171.

Service Menu Selection 5-169
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Starting Box: 01
Ending Box : 02
Accept: N

Figure 5-187 Starting and Ending Dialog

Step 2 Press the button to select the current parameter value.

— or —

Press the button or the button to toggle between the Starting Box and Ending Box parameters.

Parameters	Values
Starting Box	Indicates which frame to begin the Teach Current operation. (1 4 depending on the number of expansion modules)
Ending Box	Indicates which frame to end the Teach Current operation. (1 4 depending on the number of expansion modules)
Accept	Y to accept changes N to reject changes

Step 3 Repeat Step 1 for all of the parameters in the list.

Press the button to confirm the changes.

If **Y** is selected for the Accept parameter value, the Progress Screen, refer to Figure 5-188 on page 5-171, followed by the Response Screen, refer to Figure 5-189 on page 5-171 appear.

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The requested teach is now in progress...

Figure 5-188 Progress Screen

The requested teach completed OK.

Figure 5-189 Response Screen

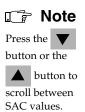
Service Menu Selection 5-171 01 Aug 2000

SAC Dialog

When SAC is selected, the SAC Dialog is displayed. See Figure 5-190. This option displays explanations of the displayed Service Action Code.

Enter SAC to lookup:
SAC: E1
I/E station door is
not closed

Figure 5-190 SAC Dialog



For additional information on the SAC codes, refer to *Service Action Codes* on page 7-3.

Demo Dialog

When Demo is selected, the Demo Dialog is displayed. See Figure 5-191. This option moves cartridges from storage element to storage element. The tape drives are not used.

At least one storage element for each media type must be empty for the Demo option to run.



For demo, all media will be moved
Cycles to Run: 009<
Accept: N

Figure 5-191 Demo Dialog

Step 1 Press the button to select the current parameter value and move to the next parameter.

5-172 Menus and Commands

— or —

Press the **v** button or the **b** button to toggle between the parameter values in the following list.

Parameters	Values
Cycles to Run	Indicates the desired cycle count (001 999)
Accept	Y to accept changes N to reject changes

Press the button to confirm the changes.

Step 2 Repeat Step 1 for all of the parameters in the list.

If **Y** is selected for the Accept parameter, the Include Drives Dialog appears. See Figure 5-192. Otherwise, the changed parameters continue to display but no action is taken.

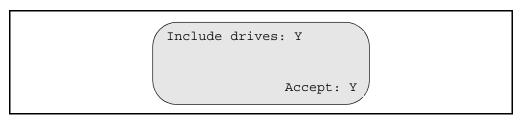


Figure 5-192 Include Drives Dialog

Step 3 Press the button to select the current parameter value and move to the next parameter.

— and/or —

Step 4 Press the

values in the following list.

button or the

button to toggle the

Parameters	Values
Include Drives	Y indicates that the drives will be included in the cycling of the cartridges N indicates that the drives will not be included in the cycling of the cartridges.
Accept	Y to accept the changed N to reject the changes.

Service Menu Selection 5-173
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If **Y** is selected for the Accept parameter value, the Response Dialog appears. See Figure 5-193. Otherwise, the changed parameters continue to display but no action is taken.

Demo with Drives Cycle: 5 of 9 Status: Running

Cancel: N<

Figure 5-193 Response Dialog

Step 5 Press the ▼ button or the ▲ button to toggle the Cancel parameter values.

Parameters Values

Cancel Y to cancel the test.

N to continue running the test.

Press the button to confirm the changes.

The value of the Cycle parameter in the Response Dialog is supplied by the library firmware and can not be changed. The Cycle parameter indicates the number of completed test cycles of requested cycles.

The value of the Status parameter in the Response Dialog is supplied by the library firmware and can not be changed. The Status parameter shows the status of the indicated cycle (Running, Completed, Error, Canceled).

If **Y** *is selected for the Cancel parameter value*, *the test is cancelled. Otherwise*, *the test continues.*

If the operation stops, the Cancel parameter no longer displays.





Advanced Dialog

When Advanced is selected, the Advanced Dialog is displayed. See Figure 5-194.

```
>Status Change...
Drive Mounts...
Other Functions...
```

Figure 5-194 Advanced Dialog

To choose one of the two selections, follow the steps.

Step 1 Press the button to select the Status Change Dialog.

— or —

Press the button or the button to select the Drive Mounts Dialog, or the Other Functions Dialog.

Press the 🖊 button.

The selected menu appears. See Status Change Dialog, or refer to Drive Mounts Dialog on page 5-176 or Other Functions Dialog on page 5-176.

Status Change Dialog

When Status Change is selected, the Status Change Dialog is displayed. Refer to Figure 5-195 on page 5-176. This dialog is reserved for Customer and Product Engineering Services and is password protected.

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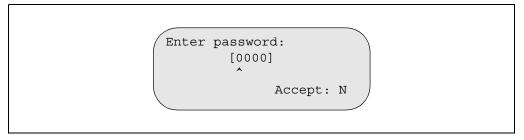


Figure 5-195 Status Change Dialog

Drive Mounts Dialog

When Drive Mounts is selected, the Drive Mounts Dialog is displayed. See Figure 5-196. This dialog is reserved for Customer and Product Engineering Services and is password protected.

```
Enter password:
[0000]
Accept: N
```

Figure 5-196 Drive Mounts Dialog

Other Functions Dialog

When Other Functions is selected, the Other Functions Dialog is displayed. See Figure 5-197. This dialog is reserved for Customer and Product Engineering Services and is password protected.

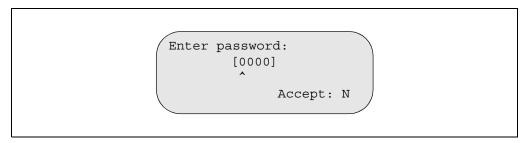


Figure 5-197 Other Functions Dialog

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About Screen Selection

The About screen displays information about the version of embedded software. About is selected from the Main Menu by following the procedure.

Step 1 If necessary, press the button until the Main Menu appears.

The Main Menu appears with the indicator positioned at Mode.

- Step 2 Press the ▼ button or the ▲ button to position the selection indicator at About.

The About Screen appears. See Figure 5-198.

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Version 3.00.0014

Figure 5-198 About Screen

Parameter Value

Version Indicates the current version of the Control Module firmware.

About Screen Selection 5-177
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6

Processing Media

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6-2 Processing Media 600561-A

Overview

During the course of normal operations, it may become necessary to add or remove storage cartridges to or from the library. Two methods are available to insert or eject storage cartridges. Information is also supplied about processing the media and using cleaning media.

Inserting Media

Placing new media into the library is accomplished by using the Insert/Eject Station. Alternately, the cartridge could be placed directly into a specific storage cell location by the Operator.

Insert/Eject Station

Using the Insert/Eject Station to insert cartridges does not disrupt library operations. To insert cartridges through the Insert/Eject Station, follow this procedure.

Step 1 Pull on the handle of the Insert/Eject Station.

The Insert/Eject Station slides out.

Step 2 Insert the cartridge into the storage cell.

Step 3 Close the Insert/Eject Station.

The library locks the Insert/Eject Station. The accessor scans the cartridge. The library unlocks the Insert/Eject Station.

Step 4 Move the cartridge to the desired storage cell with the SCSI **MOVE MEDIUM** command from the host.

— or —

Issue the **Insert** command from the Operator panel. Refer to *Insert Screen* on page 5-55.

The Accessor moves the cartridge to the first available storage cell location.

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Direct Insertion into the Control or Expansion Module



There are two levels of access control. The first is a mechanical lock which is manipulated by the key. The second is password protection which is invoked by either the host SCSI **Mode Select** command, LCD Page Security option, or through the Security option on the Operator panel.

To directly insert media, follow this procedure.

If enabled, all locks must be disabled before the procedure will succeed.

- **Step 1** If the password option is enabled, enter the password.
- **Step 2** Use the Operator panel to place the library into the NOTREADY state. Refer to *Mode Dialog Selection* on page 5-9.

The accessor completes any current task and returns to the home position.

- **Step 3** Using the key, unlock and open the library door.
- **Step 4** Place the cartridge into the desired storage cell.
- **Step 5** Close and lock the door.
- **Step 6** Place the library in the READY state. Refer to *Mode Dialog Selection* on page 5-9.
- Step 7 If Auto-Inventory is disabled, execute a SCSI INITIALIZE ELEMENT STATUS or a library Inventory command.

Ejecting Media

Removing media from the library is accomplished by using the Insert/Eject Station. Alternately, the cartridge could be directly removed from a specific storage cell location by the Operator.





Insert/Eject Station

Using the Insert/Eject Station to remove cartridges does not disrupt library operations. To remove cartridges through the Insert/Eject Station, follow this procedure.

Step 1 Issue a SCSI **MOVE MEDIUM** command from the host with the source storage cell and the destination Insert/Eject Station cell.

— or —

Execute the **Eject** command from the Operator panel. Refer to *Eject Dialog* on page 5-61.

The Insert/Eject Station is locked while the accessor moves the cartridge. After the move completes, the Insert/Eject Station unlocks.

- **Step 2** Pull on the handle to open the Insert/Eject Station.
- **Step 3** Remove the cartridge from the storage cell.
- **Step 4** Close the Insert/Eject Station.

01 Aug 2000 Ejecting Media 6-5

Direct Removal from the Control or Expansion Module



There are two levels of access control. The first is a mechanical lock which is manipulated by the key. The second is password protection which is invoked by either the host SCSI **Mode Select** command, LCD Page Security option, or through the Security option on the Operator panel.

To directly remove media, follow this procedure.

If enabled, all locks must be disabled before the procedure will succeed.

- **Step 1** If the password option is enabled, enter the password.
- **Step 2** Use the Operator panel to place the library into the NOTREADY state. Refer to *Mode Dialog Selection* on page 5-9.

The accessor completes any current task and returns to the home position.

- **Step 3** Using the key, unlock and open the library door.
- **Step 4** Remove the cartridge from the desired storage cell.
- **Step 5** Close and lock the door.
- **Step 6** Place the library in the READY state. Refer to *Mode Dialog Selection* on page 5-9.
- Step 7 If Auto-Inventory is disabled, execute a SCSI INITIALIZE ELEMENT STATUS or a library Inventory command.

Processing Media

Each tape cartridge in the Scalar 1000 must have an external label that is operator and machine readable to identify the barcode number (BC). A BC must use only uppercase letters A-Z and/or numeric values 0-9. The Scalar 1000 currently supports Code 39 and Storage Technology type barcode labels.





The 6 character 8mm bar code labels contain a 7th character checksum, which is ignored in DEFAULT media mode, is reported as A in MIXED media mode, and interpreted as part of the bar code in EXTENDED mode.

The labels may have 5-16 characters (library in EXTENDED media mode), or 6 characters plus a possible media identifier character (library in DEFAULT media mode), or 6 characters with an additional media identifier character (library in MIXED media mode).

An additional seventh character label may be used to identify the cartridge type. The cartridge type is a separate single character that follows the BC label or a single character that is included with the 6 character BC. The seventh character definition is as follows:

- The character 1 is used to identify the 3480 cartridges and is separate from the 6 character BC label.
- The character E is used to identify the ADIC 8490/IBM 3490E cartridge and is separate from the 6 character BC label.
- The character J is used to identify the IBM 3590 cartridge and is separate from the 6 character BC label.
- The character M is used to identify the Plasmon NCTP cartridge and is separate from the 6 character BC label.
- The character C is used to identify the DLT CompacTape III cartridge and is included on the 6 character BC label.
- The character D is used to identify the DLT CompacTape IV cartridge and is included on the 6 character BC label.
- The characters E is used to identify the DLT CompacTape IIIXT and is included on the 6 characters BC label.
- The character A is used to identify the AIT 8mm cartridge. Although this media identifier is currently not available for AIT 8mm barcode labels, such ID will be reported for all AIT 8mm barcode labels.

Barcode Labels

For customers who wish to print the barcode labels, the individual media labels are supported if the labels meet the ANSI MH10.8M-1983 standard and other additional requirements. The requirements are:

01 Aug 2000 Barcode Labels 6-7

• ANSI MH10.8M-1983 Standard

- Number of digits:
 - 5 16 in extended mode
 - 6 (7 including media character) in default and mixed media mode
- Background reflection: at least 25 percent
- Print contrast: at least 75 percent
- Ratio: at least 2.2
- Module: 250 mm
- Print tolerance: ± 57 mm

• Additional Requirements

- Length of the rest zones: $5.25 \text{ mm} \pm 0.25 \text{ mm}$
- No black marks can be present in the intermediate spaces or rest zones
- No white areas may be present on the bars
- A 9 digit bar code must not match the serial number of the unit, otherwise it will be ignored
- Bars should read in a uniform direction. Nonuniform reading directions are feasible in principle, but have a detrimental effect on performance
- Each label should be applied in the upper right corner of the tape cartridge recess (when oriented vertically)

• Quality Testing

Compliance with these specifications can be checked and documented with the Ergilaser 3000 High Density bar code measuring device that is manufactured by the Laetus Company.

If barcode scanning labels are purchased, the individual media labels are supported if they are acquired from the sources listed in Table 6-1 on page 6-8.

Table 6-1 Supported Labels

Media	Label	Source
Model 8490	Tri-Code	American Eagle Systems, Inc.
IBM 3590 NCTP	Tri-Optic	Engineered Data Products

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Table 6-1 Supported Labels

Media	Label	Source
DLT-III		Engineered Data Products 1703-0C
DLT-IV		Engineered Data Products 1703-0D
DLT-IIIXT		Engineered Data Products 1703-0E
AIT Series (8mm)		Engineered Data Products

Barcode Label Restrictions



Duplicate BC labels are not supported even if different media labels are used. The Scalar 1000 supports a range of media labels. With mixed media enabled, some additional restrictions apply. The label types supported in mixed media enabled and mixed media disabled are illustrated in Figure 6-1 on page 6-10.

All labels are restricted to lengths of 5 to 16 characters in extended mode, and 6 characters plus a media identifier, in default and mixed-media mode. For half inch and DLT media, in default mode the media identifier is ignored by the library firmware. In mixed-media mode the media identifier is required.

The 7th character media identifier may be separate from the barcode label, as in the case of half inch media, or may be embedded in the barcode label, as in the case of DLT media.

8mm barcode labels do not provide media identifier characters but contain an embedded checksum character, which will be disregarded by the library firmware in default and mixed-media modes. In extended mode, the checksums and media identifiers are reported as part of the barcode label.

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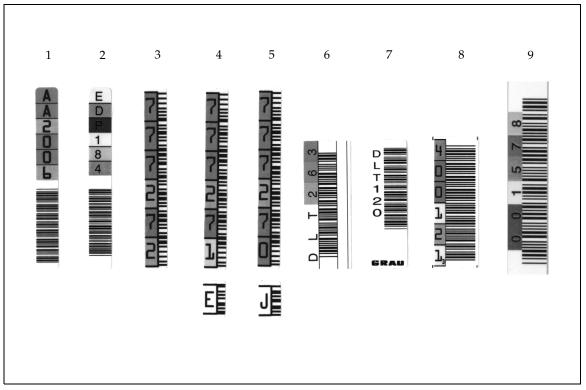


Figure 6-1 Barcode Label Examples

The numeric listing above each label type identifies the restriction associated with the label.

- This is a 6 character Code 39 forward printed label for a half inch cartridge. This label can be used only when mixed media is disabled.
- 2 This is a 6 character Code 39 backward printed label for a half inch cartridge. This label can be used only when mixed media is disabled.
- This is a 6 character Tri-Optic forward printed label for a half inch cartridge. This label can be used only when mixed media is disabled.
- This is a 6 character Tri-Optic forward printed label with one additional character media identifier for a half inch cartridge. This label can be used in both mixed media enabled and mixed media disabled applications.

5	This is a 6 character Tri-Optic forward printed label with one additional character media identifier for a half inch cartridge. This label can be used in both mixed media enabled and mixed media disabled applications.
6	This is a 6 character Code 39 forward printed label for a DLT cartridge. This label can be used only when mixed media is disabled.
7	This is a 6 character Code 39 forward printed label for a DLT cartridge. This label can be used only when mixed media is disabled.
8	This is a 7 character Code 39 backward printed label. The embedded additional 7th character media identifies the DLT cartridge media type. This label can be used in both mixed media enabled and mixed media disabled applications.
9	This is a 6 character forward printed label for an 8mm cartridge. This label can be used only when mixed media mode is disabled.

Applying the Label

All barcode scanning labels are applied to the front of the cartridge. Extreme care should be take to ensure that the barcode labels are never applied in an upside down fashion.

Cleaning Drives

Two methods are available for cleaning tape drives. The first method is controlled by Scalar 1000 firmware and applies to supported drives, e.g., 4001S, 7001S, 8001S, AIT3102, AIT5002, AIT5102, and NCTP. The second method is controlled by the host and applies to all drive types in the Scalar 1000. Host controlled drive cleaning is the default condition.

There are common items which are used for either Scalar 1000 firmware or host controlled drive cleaning. The following items refers to several Operator Panel menus. All menu information is detailed in *Chapter 5*. These items are as follows:

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It is possible to use the Insert/Eject station as storage for cleaning media but this practice is not recommended.



■ Note

If a host shares Scalar 1000 firmware controlled cleaning media, the Scalar 1000 firmware will not change or update cleaning media usage information. Therefore, the host should not share Scalar 1000 controlled cleaning media.

Under the Commands Menu selection, Insert/Eject
 Submenu, and Clean Media Insert Dialog, move either a
 single media or bulk load cleaning media from the
 Insert/Eject station to the designated empty storage cells.
 Refer to Insert Clean Tape Dialog on page 5-56. As an
 alternate method, open the Scalar 1000 door(s) and
 manually bulk load the cleaning media into empty
 storage cells. The Scalar 1000 supports a total of 128
 cleaning tapes.

If cleaning media are manually bulk loaded and Auto-Inventory is disabled, an inventory is required. Refer to *Direct Insertion into the Control or Expansion Module* on page 6-4.

- Under the Setup Menu selection, Cleaning Submenu, and Media Dialog, specify the cleaning media by BC identifier. Cleaning media is tracked by firmware and the tracking is not lost during a power off/power on cycle. When a cleaning media expires, a message is generated to inform the operator. Refer to Media Dialog on page 5-103.
- Under the Setup Menu selection, Cleaning Submenu, and Drives Dialog, choose either Scalar 1000 firmware or Host controlled drive cleaning. Refer to *Drives Dialog* on page 5-101.

If there are errors in the cleaning operation or for additional information, use the View Dialog. Refer to *View Dialog* on page 5-105.

Firmware Directed Drive Cleaning

This section outlines the method used to clean supported drives under Scalar 1000 firmware control. The following information refers to several Operator Panel menus. All menu information is detailed in *Chapter 5*.

AutoClean

If firmware control was indicated in the Drives Dialog menu, follow the list of items.

- Under the Setup Menu selection, Cleaning Submenu, and Drives Dialog, choose either Delayed or Immediate option. Refer to *Drives Dialog* on page 5-101.
 - If the Delayed option is selected, establish the cleaning process time by setting the Hour and Second option values.

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Since the Scalar 1000 will go NOTREADY for the duration of the cleaning operation, the Delayed option should be initiated during routine or normal downtime.

 If the Immediate option is selected, every dismount causes the firmware to check for a cleaning request from the drive and, if requested, cleans the drive immediately.

If the firmware receives a clean drive request, the dismount response is held until the cleaning process has finished. It is recommended that the host extend the timeout period normally associated with waiting for a dismount response.

Operator Initiated Drive Cleaning

This section outlines the method used to clean drives under operator control. For information about the menus, refer to *Chapter 5*.

Despite the settings for Scalar 1000 or host controlled cleaning, an operator may initiate drive cleaning at any time.

 Under the Utils Menu selection, Drives Submenu, use the Clean Drives Dialog to initiate a drive cleaning operation. Refer to Clean Drives Dialog on page 5-123.

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Error Messages

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7-2 Error Messages 600561-A

Overview

When a failure occurs, the Scalar 1000 firmware performs error recovery and reporting. If the failure requires a service call, Service Action Codes (SACs) are generated and posted to the Operator panel. When an operator intervention is required, a message is generate at the Operator Panel.

Service Action Codes

Table 7-1 lists the SACs and the corresponding actions that can be performed by an Operator.

Table 7-1SAC Reporting

Reported SAC	Perform these actions
01	Type 1 Software errors including Microcode and Operating System errors.
	Retrieve the current Microcode dump.
	Power Off and On the Scalar 1000 Control Module to recover from the error. Use the On/Off rocker power switch to perform this action. Wait at least one minute between Power Off and Power On.
	If the problem is not corrected or persists, contact ATAC.
02	Type 2 Software errors including Microcode and Operating System errors.
	Force a Microcode Dump and retrieve it.
	Power Off and On the Scalar 1000 Control Module to recover from the error. Use the Circuit Breaker to perform this action. Wait at least one minute between Power Off and Power On.
	If the problem is not corrected or persists, contact ATAC.

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Table 7-1 SAC Reporting

Reported SAC	Perform these actions
03	Type 3 Software errors including Microcode and Operating System errors.
	Retrieve the current Microcode dump.
	Force another Microcode Dump and retrieve it.
	Power Off and On the Scalar 1000 Control Module to recover from the error. Use the Circuit Breaker to perform this action. Wait at least one minute between Power Off and Power On.
	If the problem is not corrected or persists, contact ATAC.
04	Type 4 Software errors including Microcode and Operating System errors (the errors are not mapped).
	Retrieve the current Microcode dump.
	Force another Microcode Dump and retrieve it.
	Power Off and On the Scalar 1000 Control Module to recover from the error. Use the Circuit Breaker to perform this action. Wait at least one minute between Power Off and Power On.
	If the problem is not corrected or persists, contact ATAC.
05	A permanent Software error occurred
	Power Off and On the Scalar 1000 Control Module to recover from the error. Use the Circuit Breaker to perform this action. Wait at least one minute between Power Off and Power On.
	If the problem is not corrected or persists, contact ATAC.
10	Barcode scanner communications failed.
	Power Off and On the Scalar 1000 Control Module to recover from the error. Use the Circuit Breaker to perform this action. Wait at least one minute between Power Off and Power On.
	If the problem is not corrected or persists, contact ATAC.
12	Barcode scanner communication is OK, Barcode scanner reports that data is bad.
	Retrieve the current Microcode dump.
	If the problem is not corrected or persists, contact ATAC.

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Table 7-1SAC Reporting

Reported SAC	Perform these actions
13	Cannot read Cartridge Barcode label.
	Check Cartridge label to ensure that it meets specifications and is installed properly. Look for the following:
	 a damaged or dirty label Library not configured for correct media mode too short (less than 5 characters) or too long (more than 16 characters) label. The cell in question is displayed with the Service Action Code. Run the Start Option from the Operator Panel to retrieve this information. Refer to Service Menu Selection on page 5-130.
	If the problem is not corrected or persists, contact ATAC.
14	Cannot read the Serial Number label during a Teach operation.
	Check the Serial Number label to ensure that it is installed properly and not damaged or dirty. The Serial Number label is located on the lower right corner of the first 5x10 or 5x15 storage array in the Control Module. The Serial Number label contains a barcode and readable serial number. Example: 201100031
	If the problem is not corrected or persists, contact ATAC.
30	A fatal error is detected in SCSI Port 0.
	Verify that the library Port 0 is configured by using the Operator Panel Main Menu.
	If the problem is not corrected or persists, contact ATAC.
31	A fatal error is detected in SCSI Port 1.
	Verify the Library SCSI Port 1 is properly configured by using the Operator Panel Main Menu.
	If the problem is not corrected or persists, contact ATAC.
32	Wrong SCSI bus connection is detected.
	Verify that the Host SCSI bus is the same type as the Library SCSI Adapter card in Port 0 by using the Operator Panel Main Menu.
	If the problem is not corrected or persists, contact ATAC.

Service Action Codes 7-5

Table 7-1 SAC Reporting

Reported SAC	Perform these actions
33	Wrong SCSI bus connection is detected.
	Verify that the Host SCSI bus is the same type as the library SCSI Adapter card by using the Operator Panel Main Menu.
	If the problem is not corrected or persists, contact ATAC.
40	The Library Aisle power cannot be enabled.
	Check that all doors are closed.
	Contact ATAC.
50	A cartridge is not properly seated in the storage cell.
	Check to ensure that the cartridge in question is properly installed in its storage cell.
	Check cartridge label to ensure that it is within specifications and is installed properly and is not damaged or dirty.
	Reteach the library using the Operator panel.
	If the problem is not corrected or persists, contact ATAC.
60	Cannot complete Lock/Unlock I/E station commands.
	Run the Lock Diagnostics from the Operator Panel to check for mechanical binding.
	If the problem is not corrected or persists, contact ATAC.
71	Failures detected in the Gripper Assembly Finger Close operation.
	Run Teach Current. If the problem is not corrected or persists, contact ATAC.
72	A Get command is issued but the sensor indicated that a cartridge is already present in the Gripper Assembly.
	Look into the Gripper Assembly and see if a cartridge is present.
	 If a cartridge is found: Perform the actions in Service Action Code 02. If no cartridge is found in the Gripper Assembly: Contact ATAC.

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Table 7-1SAC Reporting

Reported SAC	Perform these actions
74	A Get command is issued but the sensor indicated that the location is empty.
	Look into the location (cell or drive) and see if a cartridge is present.
	 If no cartridge is found in this location: Perform the actions in Service Action Code 02. If a cartridge is found: Contact ATAC.
78	A Put command is issued but the sensor indicated that the cartridge is not present in the Gripper Assembly.
	Look into the Gripper Assembly and see if a cartridge is present.
	 If a cartridge is found: Contact ATAC. If no cartridge is found in the Gripper Assembly: Perform the actions in Service Action Code 02.
79	Failures detected in putting a cartridge into a DLT tape drive.
	Check the DLT tape drive to ensure that it is powered On and working properly. Refer to the DLT Maintenance Manual for any DLT drive problem.
	If the problem is not corrected or persists, contact ATAC.
7C	Failures detected in the Gripper Assembly Reach operation.
	Check for obstruction in the cell. Obstruction can be an unlabeled cartridge or a cartridge in the cell during a Put operation.
	If the problem is not corrected or persists, contact ATAC.
7D	Failures detected while getting a cartridge from the Tape Drive.
	Check for a tape in the Tape drive.
	If the problem is not corrected or persists, contact ATAC.
83	The Locate Fiducial Command failed with no target found. This failure happens most likely during an initial installation of the Library Subsystem.
	Check and clean all Teach Fiducial labels.
	Run Teach New from the Operator panel. Check that the scan beam is positioned directly in front of the label.
	If the problem is not corrected or persists, contact ATAC.

Service Action Codes 7-

Table 7-1 SAC Reporting

Reported SAC	Perform these actions
E0	A cartridge is stuck in the Gripper Assembly
	Perform the following:
	Turn off the main power Switch located on the lower panel of the rear door of all modules.
	Open the front door of the module where the Accessor is located.
	• Lift the Accessor to the top of the Y axis rail and insert an allen wrench to stop the Accessor from sliding down.
	Pull open the Insert/Eject Station.
	• If necessary, gently move the Accessor along the X axis rail until the Accessor is directly in front of the opened Insert/Eject Station.
	Gently pry apart the Accessor gripper fingers while moving the cartridge from side to side.
	After the cartridge is free, close the Insert/Eject Station, remove the allen wrench from the Accessor Y axis rail, close the front door, and apply power to the Scalar 1000 modules.
	If the problem is not corrected or persists, contact ATAC.
E1	The Insert/Eject Station door is not fully closed, Operator Intervention is required to close the door.
	Close the Insert/Eject Station door.
E2	The front door(s) are not fully closed, Operator Intervention is required to close the door(s).
	Close all the front door(s).
Е3	Wrong SCSI bus connection is detected. A Single Ended SCSI device is connected to Library Port 0 Differential Adapter.
	Check the library configuration and make sure that all devices on the library SCSI port 0 have the same SCSI type.
	If the problem is not corrected or persists, contact ATAC.
E4	Wrong SCSI bus connection is detected. A Single Ended SCSI device is connected to Library Port 1 Differential Adapter.
	Check the library configuration and make sure that all devices on the library SCSI port 1 have the same SCSI type.
	If the problem is not corrected or persists, contact ATAC.

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Table 7-1SAC Reporting

Reported SAC	Perform these actions
E5	The SCSI bus connected to Library Port 0 is not properly terminated.
	Check the SCSI bus for termination.
	If the problem is not corrected or persists, contact ATAC.
E 6	The SCSI bus connected to Library Port 1 is not properly terminated.
	Check the SCSI bus for termination.
	If the problem is not corrected or persists, contact ATAC.
E7	The Gripper Assembly detected that a cartridge is not present in the Grip fingers. The cartridge may have been dropped or the Get operation was not successful.
	Look to see if the cartridge is in the storage cell, in the base of the Gripper Assembly or on the floor of the Library. Recover the cartridge and re-inventory the Library.
E8	During an accessor more to put a cartridge after a successful Get command, the Gripper Assembly detected that the cartridge is no longer present in the Grip fingers.
	Look at the Gripper Assembly base or the floor of the Library to see if a cartridge can be located.
ЕВ	A battery low condition was detected in the Remote Management Unit (RMU)
	Replace the 9V battery in the RMU.
FOR ANY	Service may be required.
OTHER SAC	Contact ATAC and report the SAC.

Service Action Codes 7-9

Operator Intervention Messages

Table 7-2 describes the operator intervention messages. Each intervention message is composed of four lines. The third and/or fourth lines may contain variable information specific to the message. For SAC indications, refer to *Service Action Codes* on page 7-3. For Code error modifiers, refer to the *Scalar 1000 Maintenance Guide*.

Table 7-2 Operator Intervention Messages

Message Lines	Variables
Alert not found. Press Enter.	None
WARNING! The accessor could not be parked. [OK]	None
WARNING The doors could not be unlocked. [OK]	None
-=>ERROR!<=- Initialization Error Code: 0x%X	%X = 0x(8 digits) error modifier
-=>PERM ERROR!<=- CALL FOR SERVICE SAC :%X Code:0x%Y	%X = 2 digit hex %Y = 0x(8 digit) error modifier
-=>PERM ERROR!<=- SYSTEM WILL REBOOT SAC :%X Code:0x%Y	%X = 2 digit hex %Y = 0x(8 digit) error modifier
->SYSTEM REBOOTED<- NEW CODE LOADED Version %X.%YY.%ZZZZ	<pre>current version %X = 1 digit major rev %Y = 2 digit minor rev %Z = 4 digit minor rev</pre>
->SYSTEM REBOOTED<- RECOVERED FROM ERROR SAC :%X Code:0x%Y	%X = 2 digit hex %Y = 0x(8 digit) error modifier

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 Table 7-2
 Operator Intervention Messages

Message Lines	Variables
->SYSTEM REBOOTED<- CALL FOR SERVICE SAC :%X Code:0x%Y	%X = 2 digit hex %Y = 0x(8 digit) error modifier
->TOO MANY ERRORS!<- CALL FOR SERVICE SAC :%X Code:0x%Y	%X = 2 digit hex %Y = 0x(8 digit) error modifier
INTERVENTION NEEDED! Close the I/E station to complete the operation.	None
INTERVENTION NEEDED! Unexpected door open detected. Check all doors for closure.	None
INTERVENTION NEEDED! Single-ended device detected on diff. SCSI bus port 0.	None
INTERVENTION NEEDED! Single-ended device detected on diff. SCSI bus port 1.	None
INTERVENTION NEEDED! Check SCSI bus port0 connector and/or termination.	None
INTERVENTION NEEDED! Check SCSI bus port1 connector and/or termination.	None
INTERVENTION NEEDED! Remove cartridge in gripper, place back into storage.	None

 Table 7-2
 Operator Intervention Messages

Message Lines	Variables
INTERVENTION NEEDED! Storage may be full, or IE magazine types may be incorrect.	None
SERVICE MODE Cannot go online	None
Replace Terminator BAD MEDIA Cannot get type. Please label media. Cell %X (%Y %Z %A %B)	<pre>%X = index number %Y = frame number %Z = section letter %A = column number %B = row number</pre>
INTERVENTION NEEDED! Remove cartridge from cell. Cell %X (%Y %Z %A %B)	<pre>%X = index number %Y = frame number %Z = section letter %A = column number %B = row number</pre>
UPSIDE DOWN MEDIA Ensure cartridge is in cell properly. Cell %X (%Y %Z %A %B)	<pre>%X = index number %Y = frame number %Z = section letter %A = column number %B = row number</pre>
CELL IS OBSTRUCTED Please check to see if cell is empty. Cell %X (%Y %Z %A)	<pre>%X = index number %Y = rack number %Z = column number %A = row number</pre>
CELL IS EMPTY Please check to see if cell is full. Cell %X (%Y %Z %A %B)	<pre>%X = index number %Y = frame number %Z = section letter %A = column number %B = row number</pre>
LBI2 COMM FAILED Please correct the interface. Box: %X	%X = box number

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 Table 7-2
 Operator Intervention Messages

Message Lines	Variables
DRIVE COMM FAILED Please verify drive communication path. Drive %X (%Y %Z %A %B)	<pre>%X = index number %Y = frame number %Z = section letter %A = column number %B = row number</pre>
DRIVE SCSI ID FAILED Please verify drive SCSI id setting for drive %X (%Y %Z %A %B)	<pre>%X = drive number %Y = frame number %Z = section letter %A = column number %B = row number</pre>
BUTTON PUSH FAILED Please correct drive push-button state. Drive %X (%Y %Z %A %B)	%X = index number %Y = frame number %Z = section letter %A = column number %B = row number
TAPE PUSH FAILED Please remove tape from drive. Drive %X (%Y %Z %A %B)	<pre>%X = index number %Y = frame number %Z = section letter %A = column number %B = row number</pre>
CLEAN TAPE MISSING A previously defined tape is missing: volser %X	%X = volser number
CLEAN TAPE EXPIRED Please remove the cleaning tape number %X volser %Y.	%X = tape number %Y = volser number
NO CLEANING TAPE Please insert a cleaning tape for drive %X.	%X = drive number
INTERVENTION NEEDED! Locate dropped cartridge, place back into storage.	None
DRIVE CLEAN FAILED A cleaning operation failed to clean	None

 Table 7-2
 Operator Intervention Messages

Message Lines	Variables
POWER SUPPLY ERROR Check AC connection and 24V converter number %X	%X = 24 Volt Connector Number
POWER SUPPLY ERROR Check AC connection and 48V converter number %X	%X = 48 Volt Connector Number
POWER SUPPLY ERROR Check AC box and AC connection to primary/second DC supplies	None
INVALID LABEL Please check cart. for valid label %X %Y (%Z %A %B %C)	<pre>%X = type id %Y = index number %Z = frame number %A = section letter %B = column number %C = row number</pre>
DRIVE INIT FAILED Please correct drive initialization for drive %X (%Y %Z %A %B)	<pre>%X = index number %Y = frame number %Z = section letter %A = column number %B = row number</pre>

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Error Log Codes

In the event of an error, record the error information from the Error Log screen for any future reference. Refer to *Error Log Dialog* on page 5-35.

Table 7-3Error Log Reporting

Туре	Error	Modifier	Date Error Occurred

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